Ahmedabad University Course Catalogue 2023-2024

Ahmedabad University Course Catalogue

Contents:

Ahmedabad University

Academic Calendar

Programme Offices

Explanation of Course Codes

University Course Registration

Timetable (School-wise)

Course Descriptions

Ahmedabad University

- Ahmedabad University is a private, non-profit university dedicated to rigorous academic pursuit through interdisciplinary learning with a focus on building enquiry as a value. Established in 2009.
- We provide a liberal education, preparing students to reflect deeply and creatively across fields to become independent thinkers and compassionate leaders.
- This unique learning process is mediated by projects, fieldwork and a belief that a strong theoretical grounding leads to a robust practice.
- As a research university, we are building an environment where students and professors explore by reflecting, challenging views and assumptions of each other through data and rigorous discussions, and collaborating to develop insights.

Academic Calendar 2023-24

Academic Calendar 2023-24 for Returning Students of all Programmes (including incoming students of Graduate Programmes)

Monsoon Semester

First Day of Classes
Mid Semester Examination Period
Diwali Break
Quiet Reading Period
End Semester Examination Period
Semester Break

Independent Study Period

Winter Semester

First Day of Classes	January 02, 2024
Mid Semester Examination Period	February 17 - 25, 2024
Quiet Reading Period	April 15 - 19, 2024
End Semester Examination Period	April 20 - 28, 2024

Summer Term

First Day of Classes	May 06, 202
Mid Term Examination Period	Week 4, duri
End Term Examination Period	July 01 - 05,

Summer Break and Internship Period

August 01, 2023 September 16 - 24, 2023 November 13 - 15, 2023 November 27 - December 01, 2023 December 02 - 10, 2023 December 11, 2023 - January 01, 2024

December 11, 2023 - January 01, 2024

24 ing class hours 2024

April 29 - July 28, 2024

Academic Calendar 2023-24 for Incoming Students of Undergraduate and Integrated Masters Programmes

Orientation

July 26 - 29, 2023

Monsoon Semester	
First Day of Classes	July 31, 2023
Foundation Programme Begins	July 31, 2023; August 07, 2023
Foundation Programme Ends	September 27, 2023; September 29, 2023
Mid Semester Examination Period	September 16 - 17 & September 23 - 24, 2023
Bi-Semester Courses Begin	October 03, 2023
Diwali Break	November 13 - 15, 2023
Mid Bi-Semester / Monsoon End Semester	
Examination Period	December 02 - 10, 2023
Semester Break	December 11, 2023 - January 01, 2024
Indonordant Study Pariod	December 11, 2023 January 01, 2024
Independent Study Period	December 11, 2023 - January 01, 2024
Winter Semester	
First Day of Classes	January 02, 2024
Quiet Reading Period for Bi-Semester Courses	February 10 - 16, 2024
Mid Semester / End Bi-Semester Examination	
Period	February 17 - 25, 2024
Foundation Programme Begins	February 26, 2024; March 4, 2024
Foundation Programme Ends	April 24, 2024; April 26, 2024
Quiet Reading Period	April 15 - 19, 2024
End Semester Examination Period	April 20 - 28, 2024
Summer Term	
First Day of Classes	May 06, 2024
Mid Term Examination Period	Week 4, during class hours
End Term Examination Period	July 01 - 05, 2024
Summer Break and Internship Period	April 29 - July 28, 2024

Programme Offices

Amrut Mody School of Management

Undergraduate Programmes

Ahmedabad University Amrut Mody School of Management, Heritage Building Navrangpura, Ahmedabad 380009 Gujarat, India

Programme Chair

Bachelor of Businees Administration (Honours) Professor Kunal Mankodi Email: <u>kunal.mankodi@ahduni.edu.in</u>

Bachelor of Commerce (Honours) Professor Poonam Dugar Email: poonam.dugar@ahduni.edu.in

Integrated Master of Business Administration Professor Amrita Bihani Email: amrita.bihani@ahduni.edu.in

Graduate Programmes

Master of Business Administration Ahmedabad University Amrut Mody School of Management, Heritage Building Navrangpura, Ahmedabad 380009 Gujarat, India

Programme Chair

Professor Sudhir Pandey Email: <u>sudhir.pandey@ahduni.edu.in</u>

Master of Arts in Economics Professor Jeemol Unni Email: jeemol.unni@ahduni.edu.in Master of Management Studies - Heritage Management Ahmedabad University Asmita Bhavan, Central Campus Navrangpura, Ahmedabad 380009 Gujarat, India

Programme Chair

Professor Aditya Kanth Email: <u>aditya.kanth@ahduni.edu.in</u>

School of Arts and Sciences

Ahmedabad University School of Arts and Sciences Building, Central Campus Navrangpura, Ahmedabad 380009 Gujarat, India

Programme Chair

Bachelor of Arts (Honours) Professor Aparajith Ramnath Email: aparajith.ramnath@ahduni.edu.in

Bachelor of Science (Honours) Professor Ashutosh Kumar Email: <u>ashutosh.kumar@ahduni.edu.in</u>

Integrated Master of Science in Life Sciences Professor Ashutosh Kumar

Email: ashutosh.kumar@ahduni.edu.in

School of Engineering and Applied Science

Ahmedabad University GICT Building, Central Campus Navrangpura, Ahmedabad 380009 Gujarat, India

Programme Chair

Bachelor of Technology Professor Sridhar Dalai Email: <u>sridhar.dalai@ahduni.edu.in</u>

Master of Technology in Computer Science and EngineeringProfessor Professor Jayendra Bhalodiya Email: jayendra.bhalodiya@ahduni.edu.in

Venture Studio

Ahmedabad University A G Campus Navrangpura, Ahmedabad 380009 Gujarat, India

University Office

Ahmedabad University Commerce Six Roads Navrangpura, Ahmedabad 380009 Gujarat, India

Explanation of Course Codes

The system of university course codes uses a combination of three letters and three digits for each course. Letters indicate the course area and the digits indicate the level of the course and the serial number of the course in that area.

For example, in course code COM101- Effective Reading and Comprehension Skills, COM refers to the Communication area and 101 indicates that it is an undergraduate level course and its serial number is 1. Similarly, the course with the course code CSC101 is a Computer Science course at the undergraduate level with serial number 1. The course numbering system is further explained below.

Undergraduate Courses: 100-400 level courses

- 100—199 Entry level courses
- 200—299 Intermediate level courses
- 300—399 Advanced level courses with prerequisites
- 400—499 Specialisation, advanced or dissertation courses

Graduate Courses: 500-800 level courses

- 500—599 Entry level Master's courses
- 600—699 Specialisation, advanced or dissertation Master's courses
- 700—799 Entry level Doctoral courses
- 800—899 Specialisation, advanced or dissertation Doctoral courses

Seminar Courses: 900-999 level courses

* Entry level and Intermediate level courses may or may not have prerequisites.

University Course Registration

All students must register for courses online using the Ahmedabad University Resource Information System (AURIS) during the course registration period every semester. Credentials to log in to the system are communicated to all students on their University email addresses, at the time of admission. The course registration system allows students the flexibility to take courses of their choice across the University. However the final allotment of courses will be done based on the availability of courses, class size limits and fulfilment of prerequisites. Students can search for courses of their choice and choose the available time slots from the system. To maintain full time student status at the University, students need to register for at least 12 credits. The upper limit of number of courses may vary from programme to programme based on the curriculum structure.

The course registration process consists of four phases: Expression of Interest, Pre-Registration, Final Registration and Add/Drop Period.

Expression of Interest (EOI)

In this first stage of the registration process, students are required to express their desire to opt for courses from among the pool of courses available to them. This is done specifically with three objectives: one, to let students know the courses that are likely to be offered during the upcoming semester; two, to ascertain how many students are desirous of various courses, which helps the Programme Offices in planning for courses for the upcoming semester; and three, to give students who participate in the EOI an opportunity to register for those courses ahead of the other students who do not participate in the EOI.

Pre-Registration

Students need to pre-register every semester to indicate their interest in courses of their choice in the following semester. Generally, registration for the Monsoon Semester/Bi-Semester starts in the first week of June and for the Winter Semester starts in the second week of November of each academic year.

Final Registration

Students must pay the fees with all dues before the final registration starts or by the due date mentioned by the University. Courses chosen during the pre-registration phase will be reserved till the fees payment due date. If fees are not paid by the due date, courses will be removed from a student's selection and the student will need to re-register for the courses. Students who have applied for financial aid will be communicated the financial aid decision separately before the course registration starts. Final registration for the Monsoon Semester/Bi-Semester starts in the last week of June, for the Winter Semester it starts in the first week of December, and for the Summer Term it starts in the last week of March of each academic year.

Add/Drop Period

Students are encouraged to attend sessions in the courses of their interest during the first week of the semester even if they may not have registered for such a course. During this one week, they can register for such courses of their interest if there are seats. The Add/Drop period also gives flexibility to students to drop a course. Students can drop a course for a period of up to four weeks. Once the period is over students cannot drop any course they have registered for. However if a student wishes to do so due to exceptional circumstances, she may only do so with the approval of the Programme Chair, Associate Dean or Dean of the School to which she belongs. The request may be approved or rejected based on the circumstances and explanation given by the student.

The procedure for course registration is explained below.

- 1 Students need to log in to <u>www.auris.ahduni.edu.in</u> with credentials given to them.
- 2 Students must then click on the course registration tab.
- 3 Course registration will not open unless the student has paid the fees and other dues. In case they have paid the fees and are unable to register, they need to contact their Programme Office. The Programme Office will verify the payment status and facilitate the registration.
- 4 Students can see the available courses from all Schools.
- 5 Students can search for any course at any School. Through the course search facility, a student can search for courses by course code, course name, professor name, keywords of the course description, etc.
- 6 Once the student finds the course of her choice, she can see the details of the course along with available time slots.
- 7 The student can add a course with a preferred time slot. The system will check the time clash with his/her previously added courses and if no clash is found the course will be added to her course selection panel. The system will also check the maximum and minimum credit range allowed to the student.
- 8 Students can choose three courses beyond their maximum credit load as preference.
- 9 Before final confirmation, the student can add/drop any courses to and from her course selection panel.
- 10 Student can repeat this process any number of times as long as the course registration system remains open.
- 11 After the course registration system is closed, the last course choice submission will be considered as the final selection of the student and courses will be allotted based on that selection.
- 12 Add/Drop Period: Each student will be given a choice to add/drop courses during the Add/Drop Period, in case they wish to make any changes in their registration.

* In case of any difficulty during or after the course registration period student can contact their respective Programme Offices.

Timetable (School-wise) Monsoon Semester 2023

Sr.	School	Course	Credits	Prerequisites	Section	Instructor	Time and Day
NO. 1	AMSOM	COM100 Elements of Academic Reading and Writing	3		1	Preeti Maneck	08:00 am - 09:30 am Mon, Wed
2	AMSOM	COM100 Elements of Academic Reading and Writing	3		2	Preeti Maneck	08:00 am - 09:30 am Tue, Thu
3	AMSOM	COM100 Elements of Academic Reading and Writing	3		3	Seema Saxena	04:00 pm - 05:30 pm Mon, Fri
4	AMSOM	COM100 Elements of Academic Reading and Writing	3		4	Gatha Joshipura	04:00 pm - 05:30 pm Tue, Thu
5	AMSOM	COM100 Elements of Academic Reading and Writing	3		5	Urvashi Gopwani	08:00 am - 09:30 am Tue, Thu
6	AMSOM	COM100 Elements of Academic Reading and Writing	3		6	Urvashi Gopwani	08:00 am - 09:30 am Mon, Fri
7	AMSOM	COM100 Elements of Academic Reading and Writing	3		7	Urvashi Gopwani	04:00 pm - 05:30 pm Tue, Thu
8	AMSOM	COM100 Elements of Academic Reading and Writing	3		8	Seema Saxena	04:00 pm - 05:30 pm Tue, Thu
9	AMSOM	COM101 Effective Reading and Comprehension Skills	3	COM 100 Elements of Academic Reading and Writing	1	llisha Mehta	08:00 am - 09:30 am Tue, Thu
10	AMSOM	COM101 Effective Reading and Comprehension Skills	3	COM 100 Elements of Academic Reading and Writing	2	Chirag Trivedi	04:00 pm - 05:30 pm Tue, Thu
11	AMSOM	COM101 Effective Reading and Comprehension Skills	3	COM 100 Elements of Academic Reading and Writing	3	Gatha Joshipura	08:00 am - 09:30 am Mon, Fri
12	AMSOM	COM101 Effective Reading and Comprehension Skills	3	COM 100 Elements of Academic Reading and Writing	4	Purabi Bhattacharya	04:00 pm - 05:30 pm Tue, Thu
13	AMSOM	COM101 Effective Reading and Comprehension Skills	3	COM 100 Elements of Academic Reading and Writing	5	Shalvi Agarwal	04:00 pm - 05:30 pm Mon, Fri

14	AMSOM	COM101 Effective Reading and Comprehension Skills	3	COM 100 Elements of Academic Reading and	6	Saujanya Shyam	08:00 am - 09:30 am Mon, Wed
				Writing			,
15	AMSOM	COM101 Effective Reading and Comprehension Skills	3	COM 100 Elements of Academic Reading and Writing	7	Jalaj Singh	08:00 am - 09:30 am Tue, Thu
16	AMSOM	COM101 Effective Reading and Comprehension Skills	3	COM 100 Elements of Academic Reading and Writing	8	Saujanya Shyam	04:00 pm - 05:30 pm Mon, Fri
17	AMSOM	COM101 Effective Reading and Comprehension Skills	3	COM 100 Elements of Academic Reading and Writing	9	Jalaj Singh	04:00 pm - 05:30 pm Tue, Thu
18	AMSOM	COM101 Effective Reading and Comprehension Skills	3	COM 100 Elements of Academic Reading and Writing	10	Shalvi Agarwal	04:00 pm - 05:30 pm Tue, Thu
19	AMSOM	COM101 Effective Reading and Comprehension Skills	3	COM 100 Elements of Academic Reading and Writing	11	Saujanya Shyam	04:00 pm - 05:30 pm Tue, Thu
20	AMSOM	COM101 Effective Reading and Comprehension Skills	3	COM 100 Elements of Academic Reading and Writing	12	Ilisha Mehta	04:00 pm - 05:30 pm Mon, Fri
21	AMSOM	COM101 Effective Reading and Comprehension Skills	3	COM 100 Elements of Academic Reading and Writing	13	Shalvi Agarwal	08:00 am - 09:30 am Mon, Wed
22	AMSOM	COM101 Effective Reading and Comprehension Skills	3	COM 100 Elements of Academic Reading and Writing	14	Purabi Bhattacharya	04:00 pm - 05:30 pm Mon, Fri
23	AMSOM	COM102 Advanced Writing	3		1	Jalaj Singh	08:00 am - 09:30 am Mon, Fri
24	AMSOM	COM102 Advanced Writing	3		2	Purabi Bhattacharya	08:00 am - 09:30 am Tue, Thu
25	AMSOM	COM102 Advanced Writing	3		3	Jalaj Singh	04:00 pm - 05:30 pm Mon, Fri
26	AMSOM	COM102 Advanced Writing	3		4	llisha Mehta	08:00 am - 09:30 am Mon, Fri

27	AMSOM	COM102 Advanced Writing	3		5	Seema Saxena	08:00 am - 09:30 am Tue, Thu
28	AMSOM	COM102 Advanced Writing	3		6	llisha Mehta	04:00 pm - 05:30 pm Tue, Thu
29	AMSOM	COM102 Advanced Writing	3		7	Purabi Bhattacharya	08:00 am - 09:30 am Mon, Wed
30	AMSOM	COM102 Advanced Writing	3		8	Gatha Joshipura	04:00 pm - 05:30 pm Mon, Fri
31	AMSOM	COM114 Understanding Culture	3	None	1	Chirag Trivedi	05:30 pm - 07:00 pm Mon, Fri
32	AMSOM	COM115 Gender Sensitization	3		1	Chirag Trivedi	05:30 pm - 07:00 pm Tue, Thu
33	AMSOM	COM201 Effective Workplace Communication [First Quarter]	1.5		1	Sudhir Pandey	05:30 pm - 07:00 pm Tue, Thu
34	AMSOM	COM202 City as Text	3	COM101 Effective Reading and Comprehension Skills	1	Sudhir Pandey	08:00 am - 09:30 am Tue, Thu
35	AMSOM	COM210 Science Communication using Digital Media	3		1	Tana Trivedi Bhumi Shah	04:00 pm - 05:30 pm Tue, Thu
36	AMSOM	COM212 Digital Humanities	3		1	Pritha Roy	05:30 pm - 07:00 pm Mon, Fri
37	AMSOM	COM501 Managerial Communication	1.5		1	Sudhir Pandey	04:00 pm - 05:30 pm Thu
38	AMSOM	COM506 Culture and Communication	1.5		1	Chirag Trivedi	01:00 pm - 02:30 pm Mon
39	AMSOM	COM507 Communication Lab I	0.75	None OR None	1	Sudhir Pandey	04:00 pm - 05:30 pm Tue 08:00 am - 09:30 am Wed
40	AMSOM	COM511 Journalism and Media Management [Second Quarter]	1.5		1	Shyam Parekh	08:00 am - 09:30 am Tue, Thu
41	AMSOM	COM701 Research Writing	3	None	1	A. P. Ashwin Kumar	11:00 am - 12:30 pm Tue, Thu
42	AMSOM	DES101 Fundamentals of Design	3		1	Umang Shah	07:00 pm - 08:30 pm Mon, Fri

43	AMSOM	DES101 Fundamentals of Design	3		2	Hemant Wala	04:00 pm - 05:30 pm Mon <i>,</i> Fri
44	AMSOM	DES102 Visual Communication and Graphic Design	3		1	Jalp Lakhia	08:00 am - 09:30 am Wed, Fri
45	AMSOM	DES103 Biomimicry With Playfulness	3		1	Hemant Wala	05:30 pm - 07:00 pm Mon, Fri
46	AMSOM	DES201 Strategic Branding and Packaging Design	3		1	Neha Singh	05:30 pm - 07:00 pm Tue, Thu, 07:00 pm - 08:30 pm Tue, Thu
47	AMSOM	DES202 Interaction Design and User Experience	3		1	Fenil Shah	04:00 pm - 05:30 pm Tue, Thu
48	AMSOM	DES203 Design Thinking and Problem Solving	3		1	Fenil Shah	02:30 pm - 04:00 pm Tue, Thu
49	AMSOM	DGT101 Digital Futures: Technologies and Transformations [First Quarter]	1.5		1	Pritha Roy	04:00 pm - 05:30 pm Tue, Thu
50	AMSOM	DGT201 Interactive Media and Visualisation	3		1	Bhumi Shah	08:00 am - 09:30 am Tue, Thu
51	AMSOM	ECO100 Microeconomics [Bi-Semester]	3	None OR None	1	Sonal Yadav	09:30 am - 11:00 am Tue, Thu
52	AMSOM	ECO100 Microeconomics [Bi-Semester]	3	None OR None	2	To Be Announced	11:00 am - 12:30 pm Mon, Fri
53	AMSOM	ECO100 Microeconomics [Bi-Semester]	3	None OR None	3	Samarth Gupta	09:30 am - 11:00 am Wed, Fri
54	AMSOM	ECO100 Microeconomics [Bi-Semester]	3	None OR None	4	Sonal Yadav	01:00 pm - 02:30 pm Mon, Wed
55	AMSOM	ECO100 Microeconomics [Bi-Semester]	3	None OR None	6	Aranya Chakraborty	11:00 am - 12:30 pm Tue, Thu
56	AMSOM	ECO100 Microeconomics [Bi-Semester]	3	None OR None	7	To Be Announced	02:30 pm - 04:00 pm Mon, Fri
57	AMSOM	ECO100 Microeconomics [Bi-Semester]	3	None OR None	8	Aranya Chakraborty	02:30 pm - 04:00 pm Tue, Thu
58	AMSOM	ECO110 Macroeconomics	3		1	Amol Agrawal	01:00 pm - 02:30 pm Tue, Thu

59	AMSOM	ECO110 Macroeconomics	3		2	Amol Agrawal	01:00 pm - 02:30 pm Mon, Wed
60	AMSOM	ECO110 Macroeconomics	3		3	Rahul Rao	02:30 pm - 04:00 pm Thu, Tue
61	AMSOM	ECO110 Macroeconomics	3		4	Harsh Mehta	02:30 pm - 04:00 pm Mon, Fri
62	AMSOM	ECO200 Managerial Economics	3		1	Rahul Singh	05:30 pm - 07:00 pm Tue, Thu
63	AMSOM	ECO201 Intermediate Microeconomics	3	EPP100 Microeconomics, OR	1	Pallavi Vyas	02:30 pm - 04:00 pm Tue, Thu
64	AMSOM	ECO203 Experimental and Behavioral Economics	3	EPP100 Microeconomics	1	Moumita Roy	01:00 pm - 02:30 pm Tue, Thu
65	AMSOM	ECO212 Intermediate Macroeconomics	3	EPP110 Macroeconomics, OR	1	Ishita Tripathi	01:00 pm - 02:30 pm Mon, Wed
66	AMSOM	ECO220 Econometrics	3	EPP100 Microeconomics, MAT142 Introductory Calculus, STA101 Statistics, OR ECO200 Managerial Economics	1	Moumita Roy	11:00 am - 12:30 pm Tue, Thu
67	AMSOM	ECO250 History of Economic Thought	3	EPP100 Microeconomics, EPP110 Macroeconomics	1	Amol Agrawal	04:00 pm - 05:30 pm Tue, Thu
68	AMSOM	ECO280 Indian Economy: Performance and Policies	3	EPP100 Microeconomics, OR ECO200 Managerial Economics	1	Sonal Yadav	09:30 am - 11:00 am Mon, Wed
69	AMSOM	ECO300 Models of Political Economy	3		1	Abhinandan Sinha	05:30 pm - 07:00 pm Mon, Fri
70	AMSOM	ECO500 Economics For Managers	3		1	Rahul Singh	09:30 am - 11:00 am Mon, Wed
71	AMSOM	ECO501 Intermediate Microeconomics	3		1	Abhinandan Sinha	02:30 pm - 04:00 pm Mon, Fri
72	AMSOM	ECO503 Experimental and Behavioral Economics	3	EPP100 Microeconomics	1	Moumita Roy	01:00 pm - 02:30 pm Tue, Thu
73	AMSOM	ECO507 Models of Political Economy	3		1	Abhinandan Sinha	05:30 pm - 07:00 pm Mon, Fri

74	AMSOM	ECO511 Intermediate Macroeconomics	3		1	Rahul Rao	09:30 am - 11:00 am Mon, Wed
75	AMSOM	ECO544 Urban Informal Economy [First Quarter]	1.5	EPP100 Microeconomics, OR	1	Jeemol Unni	01:00 pm - 02:30 pm Mon, Fri
76	AMSOM	ECO550 History of Economic Thought	3	EPP510 Macroeconomics, EPP511 Intermediate Macroeconomics OR EPP500 Microeconomics, EPP501 Intermediate Microeconomics	1	Amol Agrawal	04:00 pm - 05:30 pm Tue, Thu
77	AMSOM	EFB101 Introduction to Entrepreneurship	1.5		1	Darshna Padia	01:00 pm - 02:30 pm Tue
78	AMSOM	EFB502 Design Thinking [First Quarter]	1.5	None	1	Kabya Borgohain	09:30 am - 11:00 am Tue, Thu
79	AMSOM	EFB508 Intellectual Property Rights	3		1	Krishna Mehta	01:00 pm - 02:30 pm Mon, Wed
80	AMSOM	EFB511 Family Business Management and Policies [First Quarter]	1.5		1	Abhijit Kothari	05:30 pm - 07:00 pm Tue, Thu
81	AMSOM	EFB512 Succession Planning and Professionalization [Second Quarter]	1.5		1	Abhijit Kothari	05:30 pm - 07:00 pm Tue, Thu
82	AMSOM	EFB602 New Venture Creation [First Quarter]	1.5		1	Subhalaxmi Mohapatra	05:30 pm - 07:00 pm Mon, Fri
83	AMSOM	EFB608 Intellectual Property Management [Second Quarter]	1.5		1	Krishna Mehta	11:00 am - 12:30 pm Tue, Thu
84	AMSOM	EFB609 Business Expansion and Growth [First Quarter]	1.5	FAC512 Financial Accounting	1	Amrita Bihani	07:00 pm - 08:30 pm Fri
85	AMSOM	ENV210 Energy and Climate Change	3		1	Supratim Das Gupta	05:30 pm - 07:00 pm Mon, Fri
86	AMSOM	ENV501 Environment and Sustainability [Second Quarter]	1		1	Minal Pathak	09:30 am - 11:00 am Tue, Thu
87	AMSOM	ENV502 Sustainable Development Goals	3		1	Minal Pathak	11:00 am - 12:30 pm Tue, Thu

88	AMSOM	ENV591 Sustainability and Circular Economy [Second Quarter]	1.5	EPP100 Microeconomics, OR EPP110	1	Supratim Das Gupta	01:00 pm - 02:30 pm Mon, Fri
		, , , , , , , , , , , , , , , , , , , ,		Macroeconomics			,
89	AMSOM	ENV701 Energy and Environment Policy	3		1	Minal Pathak	09:30 am - 11:00 am Wed, 11:00 am - 12:30 pm Wed
90	AMSOM	FAC104 Tally ERP 9.0	2	FAC114 Financial Accounting OR None	1	Rakesh Sharma	08:00 am - 09:30 am Mon, Fri
91	AMSOM	FAC112 Corporate Accounting	3		1	Vibha Tripathi	11:00 am - 12:30 pm Mon, Wed
92	AMSOM	FAC112 Corporate Accounting	3		2	Heli Shah	09:30 am - 11:00 am Tue, Thu
93	AMSOM	FAC114 Financial Accounting	3		1	Heli Shah	11:00 am - 12:30 pm Mon, Fri
94	AMSOM	FAC114 Financial Accounting [Bi-Semester]	3		2	Binny Rawat	11:00 am - 12:30 pm Tue, Thu
95	AMSOM	FAC114 Financial Accounting [Bi-Semester]	3		3	Vaibhav Kadia	09:30 am - 11:00 am Mon, Fri
96	AMSOM	FAC114 Financial Accounting [Bi-Semester]	3		4	Heli Shah	09:30 am - 11:00 am Mon, Wed
97	AMSOM	FAC114 Financial Accounting [Bi-Semester]	3		5	Heli Shah	11:00 am - 12:30 pm Tue, Thu
98	AMSOM	FAC114 Financial Accounting [Bi-Semester]	3		6	Heli Shah	01:00 pm - 02:30 pm Mon, Fri
99	AMSOM	FAC121 Direct Taxes	3		1	Mona Vora	09:30 am - 11:00 am Tue, Thu
100	AMSOM	FAC121 Direct Taxes	3		2	Nimit Thaker	01:00 pm - 02:30 pm Mon, Fri
101	AMSOM	FAC124 Fundamentals of GST [First Quarter]	1.5		1	Nimit Thaker	04:00 pm - 05:30 pm Mon, Fri
102	AMSOM	FAC125 Business Taxation [First Quarter]	1.5		1	Heli Shah	01:00 pm - 02:30 pm Tue, Thu
103	AMSOM	FAC133 Financial Management	3		1	Saumil Shah	11:00 am - 12:30 pm Mon, Wed

104	AMSOM	FAC133 Financial Management	3		2	Tanya Jain	01:00 pm - 02:30 pm Tue, Thu
105	AMSOM	FAC133 Financial Management	3		3	Tanya Jain	02:30 pm - 04:00 pm Tue, Thu
106	AMSOM	FAC133 Financial Management	3		4	Saumil Shah	01:00 pm - 02:30 pm Fri, Wed
107	AMSOM	FAC133 Financial Management	3		5	Saumil Shah	01:00 pm - 02:30 pm Tue, Thu
108	AMSOM	FAC215 Cost & Management Accounting	3		1	Binny Rawat	01:00 pm - 02:30 pm Mon, Wed
109	AMSOM	FAC215 Cost & Management Accounting	3		2	Binny Rawat	02:30 pm - 04:00 pm Tue, Thu
110	AMSOM	FAC223 Tax Procedure	3		1	Nimit Thaker	05:30 pm - 07:00 pm Mon, Fri
111	AMSOM	FAC225 Fundamentals of Corporate Governance	3		1	Narendra Kushwaha	04:00 pm - 05:30 pm Mon, Fri
112	AMSOM	FAC241 Banking	3	FAC133 Financial Management	1	Hetal Jhaveri	01:00 pm - 02:30 pm Mon, Wed
113	AMSOM	FAC244 Financial Markets	3	FAC131 Financial Management - I	1	Sanjay Banerji	02:30 pm - 04:00 pm Mon, Fri 11:00 am - 12:30 pm Sat
114	AMSOM	FAC311 Analysing Corporate Annual Report	3		1	Vibha Tripathi	11:00 am - 12:30 pm Tue, Thu
115	AMSOM	FAC331 Corporate Finance	3		1	Hetal Jhaveri	02:30 pm - 04:00 pm Mon, Fri
116	AMSOM	FAC331 Corporate Finance	3		2	Karishma Dalal	09:30 am - 11:00 am Tue, Thu
117	AMSOM	FAC336 Working Capital Strategy [First Quarter]	1.5		1	Binny Rawat	01:00 pm - 02:30 pm Tue, Thu
118	AMSOM	FAC512 Financial Accounting [First Quarter]	1.5		1	Parag Patel	11:00 am - 12:30 pm Tue, Thu
119	AMSOM	FAC513 Management Accounting [Second Quarter]	1.5	FAC215 Cost & Management Accounting	1	Poonam Dugar	11:00 am - 12:30 pm Tue, Thu

120	AMSOM	FAC541 Financial Markets and Institutions	3	FAC331 Corporate Finance,FAC533 Financial Management - II	1	Sanjay Banerji	09:30 am - 11:00 am Wed, Fri 11:00 am - 12:30 pm Fri, Mon 02:30 pm - 04:00 pm Sat
121	AMSOM	FAC633 Security Analysis and Portfolio Management	З	FAC132 Financial Management - II,FAC133 Financial Management,	1	Vinodh Madhavan	09:30 am - 11:00 am Tue, Thu
122	AMSOM	FAC635 Financial Modelling	3	FAC132 Financial Management - II,	1	Mayank Patel	08:00 am - 09:30 am Wed, Fri
123	AMSOM	HRT504 Workshop	1.5		1	Aditya Prakash Kanth	01:00 pm - 02:30 pm Tue, Thu
124	AMSOM	HRT511 Heritage Discourses and Frameworks	3		1	Krupa Rajangam Neel Chapagain Molly Kaushal	11:00 am - 12:30 pm Mon, Tue, Wed, Thu, Fri
125	AMSOM	HRT512 Conservation Principles and Processes	1.5	None	1	Aditya Prakash Kanth	09:30 am - 11:00 am Mon, Fri
126	AMSOM	HRT531 Cultural Resource Mapping & Documentation	3		1	Aditya Prakash Kanth	04:00 pm - 05:30 pm Tue, Thu
127	AMSOM	HRT533 Heritage and Business: Designing Heritage Experiences	1.5	None	1	Ioannis Poulios	02:30 pm - 04:00 pm Tue, Thu
128	AMSOM	HRT634 Arts, Culture and Heritage – A Managerial Economics Perspective	3		1	A Damodaran Neel Chapagain	11:00 am - 12:30 pm Mon, Tue, Wed, Thu, Fri, Sat 09:30 am - 11:00 am Fri
129	AMSOM	INS511 Perspective on Market Research Sector	1	None	1	Ravi Miglani	08:00 am - 09:30 am Sat
130	AMSOM	INS512 Perspective on Real Estate Sector	1		1	Parag Patel Satish Mehta	09:30 am - 11:00 am Sat 11:00 am - 12:30 pm Sat
131	AMSOM	INS514 Perspective on Banking	1		1	Hetal Jhaveri	01:00 pm - 02:30 pm Sat

132	AMSOM	MAT142 Introductory Calculus	3	1	Bhaktida Trivedi	09:30 am - 11:00 am Tue, Thu
133	AMSOM	MAT142 Introductory Calculus	3	2	Dinesh Barot	11:00 am - 12:30 pm Mon, Fri
134	AMSOM	MAT142 Introductory Calculus	3	3	Bhaktida Trivedi	01:00 pm - 02:30 pm Tue, Thu
135	AMSOM	MAT142 Introductory Calculus	3	4	Ashwin Pande	11:00 am - 12:30 pm Tue, Thu
136	AMSOM	MAT142 Introductory Calculus	3	8	Bhaktida Trivedi	08:00 am - 09:30 am Mon, Wed
137	AMSOM	MAT142 Introductory Calculus [Bi-Semester]	3	5	Pravakar Paul	01:00 pm - 02:30 pm Mon, Wed
138	AMSOM	MAT142 Introductory Calculus [Bi-Semester]	3	6	To Be Announced	01:00 pm - 02:30 pm Tue, Thu
139	AMSOM	MAT142 Introductory Calculus [Bi-Semester]	3	7	Jitesh Jhawar	09:30 am - 11:00 am Mon, Fri
140	AMSOM	MGT105 History of Indian Business	3	1	Tana Trivedi	04:00 pm - 05:30 pm Mon, Fri
141	AMSOM	MGT111 Identity and Behaviour	3	1	Garima Khemani	09:30 am - 11:00 am Mon, Wed
142	AMSOM	MGT111 Identity and Behaviour	3	2	Samvet Kuril	11:00 am - 12:30 pm Tue, Thu
143	AMSOM	MGT111 Identity and Behaviour	3	3	Samvet Kuril	01:00 pm - 02:30 pm Tue, Thu
144	AMSOM	MGT111 Identity and Behaviour	3	9	Garima Khemani	01:00 pm - 02:30 pm Mon, Wed
145	AMSOM	MGT111 Identity and Behaviour [Bi-Semester]	3	4	Amrita Bihani	11:00 am - 12:30 pm Mon, Wed
146	AMSOM	MGT111 Identity and Behaviour [Bi-Semester]	3	5	Jatin Christie	09:30 am - 11:00 am Mon, Fri
147	AMSOM	MGT111 Identity and Behaviour [Bi-Semester]	3	6	Jatin Christie	11:00 am - 12:30 pm Tue, Thu
148	AMSOM	MGT111 Identity and Behaviour [Bi-Semester]	3	7	Vedant Dev	09:30 am - 11:00 am Tue, Thu

149	AMSOM	MGT111 Identity and Behaviour [Bi-Semester]	3		8	Vedant Dev	09:30 am - 11:00 am Mon, Fri
150	AMSOM	MGT112 Organisation Processes	3		1	Amrita Bihani	01:00 pm - 02:30 pm Mon, Wed
151	AMSOM	MGT112 Organisation Processes	3		2	Amrita Bihani	01:00 pm - 02:30 pm Tue, Thu
152	AMSOM	MGT112 Organisation Processes	3		3	Jatin Christie	02:30 pm - 04:00 pm Mon, Fri
153	AMSOM	MGT121 Human Capital Management	3		1	Ekta Sharma	09:30 am - 11:00 am Mon, Fri
154	AMSOM	MGT121 Human Capital Management	3		2	Miti Randeri	09:30 am - 11:00 am Tue, Thu
155	AMSOM	MGT121 Human Capital Management	3		3	Miti Randeri	08:00 am - 09:30 am Tue, Thu
156	AMSOM	MGT136 Indian Legal System [First Quarter]	1.5		1	Krishna Mehta	09:30 am - 11:00 am Mon, Wed
157	AMSOM	MGT136 Indian Legal System [First Quarter]	1.5		2	Krishna Mehta	11:00 am - 12:30 pm Tue, Thu
158	AMSOM	MGT136 Indian Legal System [Second Quarter]	1.5		3	Nimit Thaker	11:00 am - 12:30 pm Mon, Fri
159	AMSOM	MGT136 Indian Legal System [Second Quarter]	1.5		4	Krishna Mehta	09:30 am - 11:00 am Mon, Wed
160	AMSOM	MGT136 Indian Legal System [Second Quarter]	1.5		5	Krishna Mehta	09:30 am - 11:00 am Tue, Thu
161	AMSOM	MGT221 Strategic Human Resource Management	3	MGT121 Human Resource Management	1	Amrita Bihani	09:30 am - 11:00 am Mon, Wed
162	AMSOM	MGT223 Industrial Relations and Employment Laws	3	MGT121 Human Resource Management,MGT221 Strategic Human Resource Management	1	Nimit Thaker	01:00 pm - 02:30 pm Tue, Thu
163	AMSOM	MGT234 Civil & Property Laws	3		1	Krishna Mehta	11:00 am - 12:30 pm Mon, Wed
164	AMSOM	MGT239 Legal and Ethical Aspects of Digital Technologies [Second Quarter]	1.5		1	Nimit Thaker	05:30 pm - 07:00 pm Tue, Thu

165	AMSOM	MGT328 People Analytics	3		1	Urjit Kavi	05:30 pm - 07:00 pm Tue, Thu
166	AMSOM	MGT341 Competitive Strategy [First Quarter]	1.5		1	Mayank Aggarwal	09:30 am - 11:00 am Mon, Fri
167	AMSOM	MGT341 Competitive Strategy [First Quarter]	1.5		2	Mayank Aggarwal	11:00 am - 12:30 pm Mon, Fri
168	AMSOM	MGT341 Competitive Strategy [Second Quarter]	1.5		3	Mayank Aggarwal	11:00 am - 12:30 pm Mon, Fri
169	AMSOM	MGT341 Competitive Strategy [Second Quarter]	1.5		4	Mayank Aggarwal	09:30 am - 11:00 am Mon, Fri
170	AMSOM	MGT504 Behavioural Lab I	0.75	None	1	Urjit Kavi	11:00 am - 12:30 pm Fri
171	AMSOM	MGT505 Problem Solving for Social Change [First Quarter]	1.5		1	Sudhir Pandey	01:00 pm - 02:30 pm Tue, Thu, 02:30 pm - 04:00 pm Mon
172	AMSOM	MGT506 Digital Thinking [First Quarter]	1.5		1	Prithwiraj Mukherjee	01:00 pm - 02:30 pm Mon, Fri
173	AMSOM	MGT506 Digital Thinking [Second Quarter]	1.5		2	Prithwiraj Mukherjee	01:00 pm - 02:30 pm Mon, Fri
174	AMSOM	MGT509 Business Models [Second Quarter]	1.5		1	To Be Announced	01:00 pm - 02:30 pm Mon, Fri
175	AMSOM	MGT509 Business Models [Second Quarter]	1.5		2	Kunal Mankodi	01:00 pm - 02:30 pm Mon, Fri
176	AMSOM	MGT511 Organisational Behaviour [First Quarter]	1.5	None	1	Vedant Dev Kashika Sud	01:00 pm - 02:30 pm Wed, Fri
177	AMSOM	MGT513 Leadership	3	MGT112 Organisation Processes	1	Jatin Christie	02:30 pm - 04:00 pm Tue, Thu
178	AMSOM	MGT521 People Practices and Decision Making [First Quarter]	1.5	MGT112 Organisation Processes	1	Miti Randeri	02:30 pm - 04:00 pm Tue, Thu
179	AMSOM	MGT522 Strategic Human Resource Management	3	MGT 121 Human Capital Management	1	Amrita Bihani	09:30 am - 11:00 am Mon, Wed
180	AMSOM	MGT524 Dark Side of Organisation [Second Quarter]	1.5		1	Nirali Pandit	01:00 pm - 02:30 pm Mon, Fri

181	AMSOM	MGT532 Industrial Relations and Labour Laws	3	MGT121 Human Resource Management	1	Nimit Thaker	01:00 pm - 02:30 pm Tue, Thu
182	AMSOM	MGT543 Corporate Strategy : Formulation & Implementation [First Quarter]	1.5	MGT333 Competitive Strategy	1	Kunal Mankodi	08:00 am - 09:30 am Mon, Fri
183	AMSOM	MGT546 Pharmaceutical Industry and Healthcare Sector: Challenges and Opportunities	3		1	Mayank Aggarwal	05:30 pm - 07:00 pm Mon, Fri
184	AMSOM	MGT621 Selection and Testing [First Quarter]	1.5		1	Ekta Sharma	11:00 am - 12:30 pm Tue, Thu
185	AMSOM	MGT623 International HRM [Second Quarter]	1.5	MGT121 Human Resource Management, OR	1	Ekta Sharma	11:00 am - 12:30 pm Tue, Thu
186	AMSOM	MGT626 Sustainable Human Resource Management [First Quarter]	1.5	MGT521 Human Resource Management	1	Ekta Sharma	11:00 am - 12:30 pm Mon, Fri, Wed
187	AMSOM	MGT628 People analytics	3	MGT 121 Human Capital Management,MGT112 Organisation Processes OR MGT521 Human Resource Management,STA101 Statistics	1	Urjit Kavi	05:30 pm - 07:00 pm Tue, Thu
188	AMSOM	MGT642 Strategies for Firms in Emerging Markets [First Quarter]	1.5	MGT541 Competitive Strategy OR MGT541 Business Strategy OR MGT541 Competitive Strategy	1	Kunal Mankodi	08:00 am - 09:30 am Tue, Thu
189	AMSOM	MKT103 Marketing Management	3		1	Jinal Parikh	02:30 pm - 04:00 pm Mon, Fri
190	AMSOM	MKT103 Marketing Management	3		2	Zalak Shah	11:00 am - 12:30 pm Tue, Thu
191	AMSOM	MKT103 Marketing Management	3		3	Mahendra Singh Rao	02:30 pm - 04:00 pm Tue, Thu
192	AMSOM	MKT103 Marketing Management	3		4	Bijal Mehta	02:30 pm - 04:00 pm Mon, Fri
193	AMSOM	MKT312 Essentials of Marketing Research	3	MKT101 Marketing Management - I	1	Sujo Thomas	04:00 pm - 05:30 pm Tue, Thu

194	AMSOM	MKT321 Marketing of Services	3	MKT101 Marketing Management - I, OR MKT103 Marketing Management	1	Darshna Padia	02:30 pm - 04:00 pm Tue, Thu
195	AMSOM	MKT324 Retail Management	3	MKT101 Marketing Management - I,MKT102 Marketing Management - II	1	Sujo Thomas	05:30 pm - 07:00 pm Tue, Thu
196	AMSOM	MKT341 Marketing Strategy for Consumer Behaviour	3		1	Zalak Shah	04:00 pm - 05:30 pm Mon, Fri
197	AMSOM	MKT352 Advertising: Crafting Contagious Content	3		1	Darshna Padia	04:00 pm - 05:30 pm Tue, Thu
198	AMSOM	MKT501 Products, Brands and Markets	3		1	Bijal Mehta	11:00 am - 12:30 pm Mon, Wed
199	AMSOM	MKT601 Business to Business Marketing	3	MKT101 Marketing Management - I,MKT102 Marketing Management - II, OR MKT103 Marketing Management	1	Zalak Shah	01:00 pm - 02:30 pm Tue, Thu
200	AMSOM	MKT623 Marketing the Intangible [Second Quarter]	1.5	MKT103 Marketing Management	1	Bijal Mehta	09:30 am - 11:00 am Tue, Thu
201	AMSOM	MKT625 Business of Sports - Marketing and Consumer Behaviour Perspective	3	MKT501 Marketing Management	1	Mahendra Singh Rao	04:00 pm - 05:30 pm Tue, Thu
202	AMSOM	MKT631 Sales and Distribution Management	3	MKT103 Marketing Management	1	Kavita Saxena	09:30 am - 11:00 am Mon, Wed
203	AMSOM	MKT631 Sales and Distribution Management	3	MKT103 Marketing Management	2	Kavita Saxena	02:30 pm - 04:00 pm Mon, Fri
204	AMSOM	MKT642 Interdisciplinary Approach To Consumer Understanding	3	None	1	Ravi Miglani	08:00 am - 09:30 am Tue, Thu
205	AMSOM	MKT642 Interdisciplinary Approach To Consumer Understanding	3	None	2	Ravi Miglani	08:00 am - 09:30 am Wed, Fri

206	AMSOM	MKT651 Integrated Marketing Communication	3	MKT101 Marketing Management - I	1	Venkatesh lyer	05:30 pm - 07:00 pm Tue, Thu 02:30 pm - 04:00 pm Sat 04:00 pm - 05:30 pm Sat
207	AMSOM	MKT651 Integrated Marketing Communication	3	MKT101 Marketing Management - I	2	Rama Jayanti	05:30 pm - 07:00 pm Tue, Thu
208	AMSOM	MKT653 Digital Marketing	3		1	Bijal Mehta	02:30 pm - 04:00 pm Tue, Thu
209	AMSOM	MKT654 Strategic Brand Management	3	MKT101 Marketing Management - I, OR	1	Kavita Saxena	05:30 pm - 07:00 pm Mon, Fri
210	AMSOM	RES601 Quantitative Research Methods [Second Quarter]	1.5		1	Bhargav Adhvaryu	02:30 pm - 04:00 pm Tue, Thu
211	AMSOM	STA100 Probability	3	MAT100 Calculus and Differential Equations	1	Loyimee Gogoi	01:00 pm - 02:30 pm Tue, Thu
212	AMSOM	STA100 Probability	3	MAT100 Calculus and Differential Equations	2	Vinay Vachharajani	11:00 am - 12:30 pm Mon, Fri
213	AMSOM	STA100 Probability	3	MAT100 Calculus and Differential Equations	3	Dinesh Barot	01:00 pm - 02:30 pm Mon, Wed
214	AMSOM	STA101 Introductory Statistics	3	CSD101 Intermediate Level Data Science	1	Kaushik Jana	01:00 pm - 02:30 pm Mon, Fri
215	AMSOM	STA101 Introductory Statistics	3	CSD101 Intermediate Level Data Science	2	Dinesh Barot	11:00 am - 12:30 pm Tue, Thu
216	AMSOM	STA101 Introductory Statistics	3	CSD101 Intermediate Level Data Science	3	Vinay Vachharajani	11:00 am - 12:30 pm Tue, Thu
217	AMSOM	STA101 Introductory Statistics	3	CSD101 Intermediate Level Data Science	4	Vinay Vachharajani	02:30 pm - 04:00 pm Mon, Fri
218	AMSOM	STA101 Introductory Statistics	3	CSD101 Intermediate Level Data Science	5	Vivek Bhatt	01:00 pm - 02:30 pm Mon, Fri
219	AMSOM	TOD205 Database Management for Managers	3		1	Vivek Bhatt	08:00 am - 09:30 am Mon, Fri
220	AMSOM	TOD210 Business Analytics [First Quarter]	1.5	MAT142 Introductory Calculus, OR	1	Vivek Bhatt	04:00 pm - 05:30 pm Tue, Thu

221	AMSOM	TOD212 Decision Sciences	3	STA100 Probability, OR STA101 Statistics	1	Bhaktida Trivedi	11:00 am - 12:30 pm Tue, Thu
222	AMSOM	TOD212 Decision Sciences	3	STA100 Probability, OR STA101 Statistics	2	Bhaktida Trivedi	09:30 am - 11:00 am Mon, Fri
223	AMSOM	TOD212 Decision Sciences	3	STA100 Probability, OR STA101 Statistics	3	Bhaktida Trivedi	11:00 am - 12:30 pm Wed, Fri
224	AMSOM	TOD221 Operations Management	3	EPP100 Microeconomics, OR	1	Ab Raju	05:30 pm - 07:00 pm Mon, Fri
225	AMSOM	TOD221 Operations Management	3	EPP100 Microeconomics, OR	2	Ab Raju	04:00 pm - 05:30 pm Mon, Fri
226	AMSOM	TOD221 Operations Management	3	EPP100 Microeconomics, OR	3	Ab Raju	04:00 pm - 05:30 pm Tue, Thu
227	AMSOM	TOD301 Simulation Modeling	3		1	Vivek Bhatt	01:00 pm - 02:30 pm Tue, Thu
228	AMSOM	TOD310 Predictive Analytics for Business	3	STA100 Probability	1	Vivek Bhatt	04:00 pm - 05:30 pm Mon, Fri
229	AMSOM	TOD322 Supply Chain Management	3		1	Ab Raju	05:30 pm - 07:00 pm Tue, Thu
230	AMSOM	TOD324 Service Operations Management	3		1	Sanjoy Mukerji	11:00 am - 12:30 pm Sat 01:00 pm - 02:30 pm Sat
231	AMSOM	TOD326 Project Management	3		1	Padmin Buch	09:30 am - 11:00 am Tue, Thu
232	AMSOM	TOD501 Probability and Statistics [First Quarter]	1.5		1	Bhargav Adhvaryu	02:30 pm - 04:00 pm Tue, Thu
233	AMSOM	TOD504 Mathematical Methods for Economics	3		1	Supratim Das Gupta	04:00 pm - 05:30 pm Mon, Fri
234	AMSOM	TOD512 Decision Science [Second Quarter]	1.5		1	To Be Announced	01:00 pm - 02:30 pm Tue, Thu
235	AMSOM	TOD522 Supply Chain Management [Second Quarter]	1.5	TODS211 Quantitative Methods for Business,,TODS208 Calculus for Business	1	Aasheesh Dixit	07:00 pm - 08:30 pm Mon, Fri

236	AMSOM	TOD526 Project Management	2		1	Padmin Buch	08:00 am - 09:30 am Tue, Thu
237	AMSOM	TOD531 Analytics Lab	1		1	Amit Saraswat	09:30 am - 11:00 am Sat 11:00 am - 12:30 pm Sat 08:00 am - 09:30 am Tue, Thu
238	SAS	BIO 107 Concepts of Biology	3		1	Pooja Shah	08:00 am - 09:30 am Mon, Wed
239	SAS	BIO 107 Concepts of Biology	3		2	Pooja Shah	08:00 am - 09:30 am Tue, Thu
240	SAS	BIO 791 Research Rotation II	4	None	1	Rama Ratnam	09:45 am - 12:30 pm Sun
241	SAS	BIO101 Introductory Biology [Bi-Semester]	3		1	Rama Ratnam	11:00 am - 12:30 pm Mon, Wed
242	SAS	BIO106 Introductory Biology practical	1.5	None	1	Ashi Thobias	01:00 pm - 02:30 pm Mon, Fri 02:30 pm - 04:00 pm Mon, Fri
243	SAS	BIO106 Introductory Biology practical	1.5	None	2	Ashi Thobias	01:00 pm - 02:30 pm Tue, Thu 02:30 pm - 04:00 pm Tue, Thu
244	SAS	BIO200 Human Physiology	3		1	Souvik Sen Gupta	02:30 pm - 04:00 pm Tue, Thu
245	SAS	BIO203 Biochemistry and Genetics Practicals	3	None	1	Ashi Thobias	09:30 am - 11:00 am Mon, Wed 11:00 am - 12:30 pm Mon, Wed
246	SAS	BIO203 Biochemistry and Genetics Practicals	3	None	2	Ashi Thobias	09:30 am - 11:00 am Tue, Thu 11:00 am - 12:30 pm Tue, Thu

247	SAS	BIO205 Molecular biology and Bioinformatics practical	3	None	1	Ashi Thobias	01:00 pm - 02:30 pm Tue, Thu 02:30 pm - 04:00 pm Tue, Thu
248	SAS	BIO205 Molecular biology and Bioinformatics practical	3	None	2	Ashi Thobias	09:30 am - 11:00 am Wed, Fri 11:00 am - 12:30 pm Wed, Fri
249	SAS	BIO206 Physiology Laboratory Course	1.5		1	Souvik Sen Gupta	05:30 pm - 07:00 pm Mon 04:00 pm - 05:30 pm Mon
250	SAS	BIO206 Physiology Laboratory Course	1.5		2	Souvik Sen Gupta	04:00 pm - 05:30 pm Tue 05:30 pm - 07:00 pm Tue
251	SAS	BIO209 Basic Biochemistry	3		1	Ashim Rai	02:30 pm - 04:00 pm Mon, Fri
252	SAS	BIO211 Molecular Biology	3		1	Souvik Sen Gupta Ashutosh Kumar	02:30 pm - 04:00 pm Mon, Fri
253	SAS	BIO213 Basics of Bioinformatics	3	CSD102 Advanced Level Data Science	1	Krishna Bs Swamy	01:00 pm - 02:30 pm Mon, Fri
254	SAS	BIO310 Genetics	3		1	Krishna Bs Swamy	01:00 pm - 02:30 pm Tue, Thu
255	SAS	BIO319 Physiology of excitable cells	3	BIO101 Introductory Biology,BIO203 Molecular Biology, OR	1	Rama Ratnam	09:30 am - 11:00 am Tue, Thu
256	SAS	BIO500 Recombinant DNA Technology	3	BIO203 Molecular Biology	1	Ashutosh Kumar	01:00 pm - 02:30 pm Tue, Thu
257	SAS	BIO543 Developmental Biology	3		1	Vivek Tanavde	01:00 pm - 02:30 pm Tue, Thu
258	SAS	BIO543 Developmental Biology	3		2	Vivek Tanavde	08:00 am - 09:30 am Tue, Thu
259	SAS	BIO553 Animal Behaviour	3		1	Ratna Ghosal	04:00 pm - 05:30 pm Tue, Thu

260	SAS	BIO554 Forensic Biotechnology	3		1	Ritesh Shukla	11:00 am - 12:30 pm Tue, Thu
261	SAS	BIO598 Master Thesis I	6		1	Ritesh Shukla	09:45 am - 12:30 pm Sun
262	SAS	BIO600 Evolutionary Biology	3	BIO101 Basic Biology I	1	Subhash Rajpurohit	01:00 pm - 02:30 pm Mon, 09:30 am - 11:00 am Fri
263	SAS	BPS103 Microscopy and Imaging	3	BIO101 Introductory Biology,	1	Ritesh Shukla	11:00 am - 12:30 pm Mon, Wed
264	SAS	CSC 210 Introductions to Data Structures and Algorithms	3	CSE100 Fundamentals of Computer Programming	1	Sayan Goswami	11:00 am - 12:30 pm Mon, Wed
265	SAS	ENV602 Air Quality	3		1	Aditya Vaishya	07:00 pm - 08:30 pm Tue, Thu
266	SAS	ETH201 Ethics	3		1	Joseph Van Weelden	01:00 pm - 02:30 pm Wed, Fri
267	SAS	FRE111 Conversational French - I	3		1	Tahereh Rahimdel	09:30 am - 11:00 am Mon, Wed, Fri
268	SAS	FRE111 Conversational French - I	3		2	Tahereh Rahimdel	08:00 am - 09:30 am Mon, Wed, Fri
269	SAS	GER 111 Conversational German I	3		1	Mital Patel	02:30 pm - 04:00 pm Tue, Thu, Mon
270	SAS	HST 201 Trade and Religion in the Indian Ocean World	3	None	1	Murari Jha	02:30 pm - 04:00 pm Mon, Fri
271	SAS	HST101 Ahmedabad as a Gateway to the World	3		1	Safwan Amir Guillaume Wadia	02:30 pm - 04:00 pm Tue, Thu
272	SAS	HST101 Ahmedabad as a Gateway to the World [Bi-Semester]	3		2	Aparajith Ramnath To Be Announced	11:00 am - 12:30 pm Tue, Thu
273	SAS	HST220 Science, Technology, and the Making of the Modern World	3		1	Aparajith Ramnath	02:30 pm - 04:00 pm Tue, Thu
274	SAS	IHS701 Key Concepts in Social Theory	3		1	Tejaswini Niranjana Maya Ratnam	11:00 am - 12:30 pm Mon 01:00 pm - 02:30 pm Mon
275	SAS	JAP111 Conversational Japanese - I	3		1	Akshay Chudasama	05:30 pm - 07:00 pm Tue, Thu, Fri

276	SAS	JAP211 Intermediate Conversational Japanese - I	3	JAP-101 Japanese for beginners, OR JAP111 Conversational Japanese - I,JAP112 JAP 112 Conversational Japanese - II OR PHL132 Introduction to Japanese,JAP102 Introduction to Japanese OR PHL132 Introduction to Japanese,JAP112 JAP 112 Conversational	1	Akshay Chudasama	07:00 pm - 08:30 pm Tue, Thu, Fri
277	SAS	LIT105 Urdu Prose and Poetry	3	Japanese - II None	1	Salmabanu Shaikh	04:00 pm - 05:30 pm Mon, Fri
278	SAS	LIT120 Introduction to Hindi Literature	3		1	Charu Singh	02:30 pm - 04:00 pm Mon, Fri
279	SAS	MAT 146 Intermediate Calculus [Bi-Semester]	3		1	Ashwin Pande	01:00 pm - 02:30 pm Tue, Thu
280	SAS	MAT 485 Introduction to Quantum Computing	3	MAT 246 Linear Algebra OR MAT204 Applied Linear Algebra OR PHY310 Quantum Mechanics I	1	Alok Shukla	05:30 pm - 07:00 pm Tue, Thu
281	SAS	MAT256 Differential Equations	3	MAT142 Introductory Calculus	1	Alok Shukla	01:00 pm - 02:30 pm Tue, Thu
282	SAS	MAT268 Introduction to Mathematical Biology	3		1	Sutapa Mukherji Jitesh Jhawar	04:00 pm - 05:30 pm Tue, Thu
283	SAS	MAT312 Abstract Algebra	3	MAT200 Linear Algebra OR MAT101 Discrete Mathematics OR MAT142 Introductory Calculus	1	Eshita Mazumdar	02:30 pm - 04:00 pm Mon, Fri
284	SAS	MAT585 Introduction to Quantum Computing	3	None	1	Alok Shukla	05:30 pm - 07:00 pm Tue, Thu
285	SAS	MAT775 Lie algebras and their applications in quantum physics	3		1	Alok Shukla	09:30 am - 11:00 am Mon, Fri
286	SAS	MUS101 Inside Indian Music	3		1	Prachi Vaidya	04:00 pm - 05:30 pm Mon, Fri

287	SAS	MUS103 Culturing the Voice	3		1	Prachi Vaidya	04:00 pm - 05:30 pm Tue, Thu
288	SAS	MUS104 Fundamentals of Music and Sound [Bi-Semester]	3		1	Lakshmi Sreeram	09:30 am - 11:00 am Mon, Wed
289	SAS	MUS105 A Glimpse into the World of Hindustani Music	3		1	Lakshmi Sreeram	04:00 pm - 05:30 pm Tue, Thu
290	SAS	PER101 Introduction to Persian I	3	None OR None	1	Salmabanu Shaikh	04:00 pm - 05:30 pm Tue, Thu
291	SAS	PHI 260 Political Philosophy	3		1	Joseph Van Weelden	11:00 am - 12:30 pm Tue, Thu
292	SAS	PHI 360 Political Philosophy	3	PHI 100 Introduction to Western Philosophy, PHI 120 Introduction to Ethical Theory: Virtues, Vices and Values, PHI 200 History of Modern Philosophy: Metaphysics and Epistemology, PHI 250 Justice in a Global Context, PHL 201 Text and Interpretation, PHL 301 Foundation Seminar, PHL110 Introduction to Philosophy: Knowledge, Reality, and the Self, PHL115 Philosophy as a Way of Life	1	Joseph Van Weelden	11:00 am - 12:30 pm Tue, Thu
293	SAS	PHI100 Introduction to Western Philosophy [Bi-Semester]	3	None	1	Apaar Kumar	09:30 am - 11:00 am Tue, Thu
294	SAS	PHI120 Introduction to Ethical Theory: Virtues, Vices and Values [Bi-Semester]	3		1	Joseph Van Weelden	11:00 am - 12:30 pm Mon, Fri
295	SAS	PHI200 History of Modern Philosophy: Metaphysics and Epistemology	3	None	1	Apaar Kumar	09:30 am - 11:00 am Mon, Wed
296	SAS	PHI215 Introduction to Indian Philosophy	3		1	Shishir Saxena	04:00 pm - 05:30 pm Mon, Fri

297	SAS	PHI235 Philosophy of Psychology	3		1	Nagireddy Neelakanteswar Reddy	05:30 pm - 07:00 pm Tue, Thu
298	SAS	PHY111 Classical Mechanics [Bi-Semester]	3		1	Soumen Ghosh	01:00 pm - 02:30 pm Mon, Wed, Fri
299	SAS	PHY112 Electromagnetic Theory	3		1	Aditya Vaishya	01:00 pm - 02:30 pm Wed 02:30 pm - 04:00 pm Tue, Thu
300	SAS	PHY121 Laboratory Physics - Mechanics [Bi-Semester]	3	None	1	Samyaday Choudhury	02:30 pm - 04:00 pm Tue, Thu 04:00 pm - 05:30 pm Tue, Thu
301	SAS	PHY221 Laboratory Physics - Optics	1.5	None OR None	1	Aditya Vaishya	02:30 pm - 04:00 pm Mon 04:00 pm - 05:30 pm Mon
302	SAS	PHY310 Quantum Mechanics I	3	MAT 246 Linear Algebra, MAT 256 Differential Equations,PHY212 Oscillations, Waves, and Optics	1	Gaurav Goswami	11:00 am - 12:30 pm Tue, Thu, Fri
303	SAS	PHY314 Electrical Circuits and Electronics	3	MAT 246 Linear Algebra,MAT203 Differential Equations and Linear Algebra, OR None	1	Samyaday Choudhury	09:30 am - 11:00 am Mon, Wed
304	SAS	PHY321 Laboratory Physics - Electronics	1.5	PHY121 Laboratory Physics - I OR PHY122 Laboratory Physics: Electromagnetism	1	Soumen Ghosh	02:30 pm - 04:00 pm Fri 04:00 pm - 05:30 pm Fri

305	SAS	PHY410 General Relativity, Black	3	MAT 256 Differential	1	Pankaj Joshi	11:00 am - 12:30 pm
		holes & Cosmology		Equations, MAT103			Mon, Wed
				Foundations of Calculus			
				and Differential Equations,,			
				MAT100 Calculus and			
				Differential Equations,			
				MAT102 Discrete			
				Mathematics, MAT103			
				Foundations of Calculus			
				and Differential Equations,			
				MAT103 Calculus OR			
				MAT100 Calculus and			
				Differential Equations,			
				MAT102 Discrete			
				Mathematics, MAT103			
				Calculus, MAT281			
				Multivariable Calculus,			
				MAT281 Multivariable			
				Calculus, MAT103			
				Foundations of Calculus			
				and Differential Equations			
306	SAS	PHY431 Atmospheric Physics	3		1	Aditya Vaishya	07:00 pm - 08:30 pm
							Mon, Fri
307	SAS	PHY435 Introduction to Plasma	3		1	Soumen Ghosh	01:00 pm - 02:30 pm
		Physics					Tue, Thu
308	SAS	PHY635 Introduction to Plasma	3		1	Soumen Ghosh	01:00 pm - 02:30 pm
		Physics					Tue, Thu
309	SAS	PHY701 Mathematical Methods for	3		1	Raghavan Rangaraian	04:00 pm - 05:30 pm
		Physics	-				Thu,
		,					01:00 pm - 02:30 pm
							Wed
310	SAS	PHY731 Atmospheric Physics	3		1	Aditya Vaishya	07:00 pm - 08:30 pm
							Mon, Fri
311	SAS	PHY733 Laser Matter Interaction	3		1	Raghwinder Singh	08:00 am - 09:30 am
511	5,15		5		-		Mon. Wed
212	545	DHVZ0Z Becearch Breiset	2		1	Paghwindor Singh	08:00 am 00:20 am
512	343		3		T		00:00 am - 09:30 am
						Samyaday Choudhury	rue, mu

313	SAS	PHY798 Research Project - II	3		1	Raghwinder Singh	09:45 am - 12:30 pm
						Pankaj Joshi	Sun
						Aditya Vaishya	
314	SAS	PSY 401 Psychological Assessment	3	PSY 235 Psychophysics lab,	1	Urmi Nanda Biswas	01:00 pm - 02:30 pm
		and Testing		OR			Tue, Thu
315	SAS	PSY101 Introduction to Psychology	3		1	Divita Singh	05:30 pm - 07:00 pm
							Mon, Fri
316	SAS	PSY101 Introduction to Psychology	3		2	Nagireddy Neelakanteswar	05:30 pm - 07:00 pm
		[Bi-Semester]				Reddy	Mon, Fri
317	SAS	PSY161 Personality and Individual	3	None	1	To Be Announced	09:30 am - 11:00 am
		Differences [Bi-Semester]					Mon, Fri
318	SAS	PSY210 Cognitive Psychology	3	PSY101 Introduction to	1	Divita Singh	01:00 pm - 02:30 pm
				Psychology			Wed, Fri
319	SAS	PSY220 Social Psychology	3		1	Shilpa Pandit	02:30 pm - 04:00 pm
							Tue, Thu
320	SAS	PSY252 Health Psychology	3	PSY101 Introduction to	1	Urmi Nanda Biswas	04:00 pm - 05:30 pm
				Psychology			Tue, Thu
321	SAS	PSY280 Abnormal Psychology	3		1	Rucha Sarwate	02:30 pm - 04:00 pm
							Mon, Fri
322	SAS	PSY310 Lab in Psychology	3	RES101 Introduction to	1	Nithin George	11:00 am - 12:30 pm
				Research Methodology			Mon, Fri
323	SAS	PSY325 Thinking and Reasoning	3	PSY 210 Cognitive	1	Nagireddy Neelakanteswar	04:00 pm - 05:30 pm
				Psychology		Reddy	Tue, Thu
324	SAS	PSY350 Counselling Psychology	3	PSY252 Health Psychology,	1	Rucha Sarwate	01:00 pm - 02:30 pm
				PSY272 Industrial and			Mon, Fri
				Organisational Psychology,			
				Abnormal Psychology OR			
				PSY252 Health Psychology			
					-		
325	SAS	PVA 171 Theatre and Society	3	None OR None	1	Kabir Thakore	04:00 pm - 05:30 pm
							FII 05:30 pm - 07:00 pm
							Fri

326	SAS	PVA101 Exploring Studio Art	3		1	Rajesh Naidu	11:00 am - 12:30 pm Tue, Thu
327	SAS	PVA112 Drawing	3		1	Rajesh Naidu	11:00 am - 12:30 pm Mon, Wed
328	SAS	PVA126 Scenic Design for Theatre	3		1	Dushyant Malik	09:30 am - 11:00 am Wed, Fri
329	SAS	PVA127 Street Theatre: Raise the Voice	3		1	Savan Zalariya	07:00 pm - 08:30 pm Tue, Thu
330	SAS	PVA130 Fundamentals of Photography [Bi-Semester]	3		1	To Be Announced	11:00 am - 12:30 pm Mon, Fri
331	SAS	RES101 Introduction to Research Methodology	3		1	Maryann Chacko Kaushik Jana	04:00 pm - 05:30 pm Tue, Thu
332	SAS	SAN101 Learning Sanskrit Through Sanskrit Literature: Elementary	3		1	Shishir Saxena	01:00 pm - 02:30 pm Tue, Thu
333	SAS	SAN201 Reading Sanskrit Scholastic Texts: Elementary	3		1	Shishir Saxena	11:00 am - 12:30 pm Wed 01:00 pm - 02:30 pm Wed
334	SAS	SPS 303 Locating Globalization	3		1	Maya Ratnam	07:00 pm - 08:30 pm Tue, Thu
335	SAS	SPS102 Identity, Inequality and Difference [Bi-Semester]	3		1	Leya Mathew	01:00 pm - 02:30 pm Tue, Thu
336	SAS	SPS202 Family, Community, Nation	3		1	Maryann Chacko	01:00 pm - 02:30 pm Tue, Thu
337	SAS	SPS255 Introduction to Comparative Politics	3	None	1	Keita Omi	01:00 pm - 02:30 pm Tue, Thu
338	SAS	SPS300 Qualitative Research Methods	3	RME101 Introduction to Research Methodology	1	Maya Ratnam	11:00 am - 12:30 pm Wed, Fri
339	SAS	SPS351 Studying migration: Cultural politics of human mobility	3		1	Leya Mathew	01:00 pm - 02:30 pm Mon, Fri
340	SAS	SPS353 Political Psychology	3		1	Keita Omi	04:00 pm - 05:30 pm Tue, Thu
341	SAS	SPS354 Caste and the Contemporary	3		1	Safwan Amir	02:30 pm - 04:00 pm Mon, Fri
342	SAS	SPS400 Thesis/Capstone Project Proposal Course	3		1	Suchismita Das	04:00 pm - 05:30 pm Fri 05:30 pm - 07:00 pm Fri
-----	------	--	-----	--	---	-----------------	--
343	SAS	SPS497 Independent Project: A Gender Inclusive Approach to Menstruation and its Influence on the Notion of 'Femininity' and Gender Relations	3		1	Maryann Chacko	07:00 pm - 08:30 pm Mon, Fri
344	SAS	SPS700 Research Methods in the Social Sciences	3		1	Maya Ratnam	11:00 am - 12:30 pm Wed, Fri
345	SAS	SPS754 Caste and Contemporary	3		1	Safwan Amir	02:30 pm - 04:00 pm Mon, Fri
346	SAS	STA 355 Stochastic Processes	3	STA100 Probability	1	Susanta Tewari	09:30 am - 11:00 am Tue, Thu
347	SEAS	CHE211 Material and Energy Balance	3	None OR None	1	Snigdha Khuntia	11:00 am - 12:30 pm Tue, Fri
348	SEAS	CHE212 Mechanical Operations	2	None	1	Arijit Ganguli	01:00 pm - 02:00 pm Tue 02:00 pm - 03:00 pm Tue 11:00 am - 12:00 pm Mon
349	SEAS	CHE300 Mass Transfer Operations-II	3	CHE204 Mass Transfer Operations - I,CHE221 Thermodynamics - II	1	Sridhar Dalai	09:30 am - 11:00 am Tue, Thu
350	SEAS	CHE311 Chemical Reaction Engineering-I	2		1	Deepak Kunzru	11:00 am - 12:00 pm Mon 01:00 pm - 02:00 pm Wed
351	SEAS	CHE312 Experiments in Fluid Flow and Heat Transfer	1.5	CHE201 Fluid Mechanics	1	Harshad Shah	01:00 pm - 02:00 pm Fri 02:00 pm - 03:00 pm Fri 03:00 pm - 04:00 pm Fri

352	SEAS	CHE402 Chemical Process Simulation	2		1	Dharamashi Rabari Sridhar Dalai	09:30 am - 11:00 am Fri, 02:30 pm - 04:00 pm Fri
353	SEAS	CHE440 Process Design and Economics	2	CHE170 Introduction to Materials Science and Engineering ,CHE201 Fluid Mechanics, CHE204 Mass Transfer Operations - I, CHE211 Material and Energy Balance, CHE300 Mass Transfer Operations - II	1	Harshad Shah Arijit Ganguli	01:00 pm - 02:00 pm Mon 11:00 am - 12:00 pm Wed 10:00 am - 11:00 am Sat
354	SEAS	CHE503 Pollution Control	3		1	Harshad Shah Ramya Srinivasan	10:00 am - 11:00 am Mon, Wed, Fri
355	SEAS	CHE504 Catalysis and Catalytic Processes	3		1	Aditi Singhal	01:00 pm - 02:30 pm Tue 02:30 pm - 04:00 pm Tue
356	SEAS	CHY100 Chemistry	3		1	Aditi Singhal	11:00 am - 12:30 pm Mon, Fri
357	SEAS	CHY100 Chemistry	3		2	To Be Announced	11:00 am - 12:30 pm Mon
358	SEAS	CHY101 Organic Chemistry	3	CHY100 Chemistry	1	Aditi Singhal	11:00 am - 12:30 pm Wed, Thu
359	SEAS	CSC201 Computer Organisation	3		1	Sayan Goswami	01:00 pm - 02:30 pm Mon, Wed, Sat 02:30 pm - 04:00 pm Sat
360	SEAS	CSD100 Introduction to Data Science	3		1	Dinesh Barot Shubham Mankodiya	08:00 am - 09:30 am Mon, Fri
361	SEAS	CSD100 Introduction to Data Science	3		2	Kunjal Gajjar Anuja Gupta	04:00 pm - 05:30 pm Mon, Fri
362	SEAS	CSD100 Introduction to Data Science	3		3	Kunjal Gajjar Anuja Gupta	04:00 pm - 05:30 pm Tue, Thu
363	SEAS	CSD101 Fundamentals of Data Science	3		1	Kuntalkumar Patel Vinay Vachharajani	08:00 am - 09:30 am Mon, Fri

364	SEAS	CSD101 Fundamentals of Data Science	3	2	Shefali Naik Najma Barkat	08:00 am - 09:30 am Mon, Fri
365	SEAS	CSD101 Fundamentals of Data Science	3	3	Kuntalkumar Patel Vinay Vachharajani	08:00 am - 09:30 am Tue, Thu
366	SEAS	CSD101 Fundamentals of Data Science	3	4	Shubham Mankodiya Dinesh Barot	08:00 am - 09:30 am Tue, Thu
367	SEAS	CSD101 Fundamentals of Data Science	3	5	Shefali Naik Jinal Parikh	04:00 pm - 05:30 pm Mon, Fri
368	SEAS	CSD101 Fundamentals of Data Science	3	6	Kuntalkumar Patel Anuja Gupta	08:00 am - 09:30 am Sat 09:30 am - 11:00 am Sat
369	SEAS	CSD101 Fundamentals of Data Science	3	7	Kuntalkumar Patel Jinal Parikh	04:00 pm - 05:30 pm Tue, Thu
370	SEAS	CSD101 Fundamentals of Data Science	3	8	Shefali Naik Dinesh Barot	04:00 pm - 05:30 pm Tue, Thu
371	SEAS	CSD102 Data Science	3	1	Shefali Naik Najma Barkat	08:00 am - 09:30 am Tue, Thu
372	SEAS	CSD102 Data Science	3	2	Kuntalkumar Patel Anuja Gupta	05:30 pm - 07:00 pm Fri, Mon
373	SEAS	CSD102 Data Science	3	3	Shefali Naik Anuja Gupta	05:30 pm - 07:00 pm Tue, Thu
374	SEAS	CSE100 Fundamentals of Computer Programming	3	1	Kuntalkumar Patel	02:00 pm - 03:00 pm Mon 03:00 pm - 04:00 pm Mon 10:00 am - 11:00 am Tue, Thu
375	SEAS	CSE100 Fundamentals of Computer Programming	3	2	Kuntalkumar Patel	02:00 pm - 03:00 pm Fri 03:00 pm - 04:00 pm Fri 10:00 am - 11:00 am Tue, Thu

376	SEAS	CSE100 Fundamentals of Computer Programming	3		3	Jayendra Bhalodiya	02:00 pm - 03:00 pm Mon 03:00 pm - 04:00 pm Mon 10:00 am - 11:00 am Tue, Thu
377	SEAS	CSE100 Fundamentals of Computer Programming	3		4	Jayendra Bhalodiya	02:00 pm - 03:00 pm Fri 03:00 pm - 04:00 pm Fri 10:00 am - 11:00 am Tue, Thu
378	SEAS	CSE205 Data Structures	4	CSE100 Fundamentals of Computer Programming, CSE101 Object Oriented Programming Lab, MAT101 Discrete Mathematics OR MAT101 Discrete Mathematics, CSC100 Introduction to Computer Programming	1	Amit Nanavati	09:00 am - 10:00 am Mon, Wed, Fri 01:00 pm - 02:00 pm Mon 02:00 pm - 03:00 pm Mon
379	SEAS	CSE205 Data Structures	4	CSE100 Fundamentals of Computer Programming, CSE101 Object Oriented Programming Lab, MAT101 Discrete Mathematics OR MAT101 Discrete Mathematics, CSC100 Introduction to Computer Programming	2	Amit Nanavati	09:00 am - 10:00 am Mon, Wed, Fri 01:00 pm - 02:00 pm Wed 02:00 pm - 03:00 pm Wed
380	SEAS	CSE300 Software Engineering	3		1	Khushru Doctor	09:30 am - 11:00 am Sat 11:00 am - 12:30 pm Sat

381	SEAS	CSE332 Operating Systems	4	CSE100 Fundamentals of Computer Programming,CSE205 Data Structures,CSE2XX Computer Organization and Architecture	1	Jatayu Baxi	09:30 am - 11:00 am Thu 01:00 pm - 02:00 pm Mon 02:00 pm - 03:00 pm Mon 05:30 pm - 07:00 pm Sat
382	SEAS	CSE332 Operating Systems	4	CSE100 Fundamentals of Computer Programming,CSE205 Data Structures,CSE2XX Computer Organization and Architecture	2	Jatayu Baxi	09:30 am - 11:00 am Thu 02:00 pm - 03:00 pm Wed 01:00 pm - 02:00 pm Wed 05:30 pm - 07:00 pm Sat
383	SEAS	CSE332 Operating Systems	4	CSE100 Fundamentals of Computer Programming,CSE205 Data Structures,CSE2XX Computer Organization and Architecture	3	Jatayu Baxi	09:30 am - 11:00 am Thu 01:00 pm - 02:00 pm Fri 02:00 pm - 03:00 pm Fri 05:30 pm - 07:00 pm Sat
384	SEAS	CSE340 Operating Systems	3	CSC100 Introduction to Computer Programming	1	Susanta Tewari	09:30 am - 11:00 am Wed, Fri
385	SEAS	CSE511 Algorithms and Optimisation for Big Data	3		1	Dhaval Patel	08:00 am - 09:30 am Mon, Fri
386	SEAS	CSE516 Probabilistic Graphical Models	3	None OR None	1	Dhaval Patel	09:30 am - 11:00 am Tue, Thu

387	SEAS	CSE518 Artificial Intelligence	3	CSC104 Introduction to Computation and Programming, CSC210 Data Structures and Algorithms, MAT101 Discrete Mathematics,	1	Shashi Prabh	08:00 am - 09:30 am Tue, Thu
388	SEAS	CSE525 Theory of Computing	3	CSC210 Data Structures and Algorithms, CSC310 Advanced Data Structures and Algorithms	1	Manjil Saikia	10:00 am - 11:00 am Mon, Wed, Fri 01:00 pm - 02:30 pm Sat
389	SEAS	CSE526 Advanced Computer Arithmetic: Algorithms and Sub- systems	3	EVD210 Computer Organisation OR ECE209 Digital Design, EVD210 Computer Organisation	1	Mazad Zaveri	01:00 pm - 02:30 pm Tue, Thu
390	SEAS	CSE540 Cloud Computing	3	CSC330 Computer Networks, CSC340 Operating Systems, COSC201 Data Structures and Algorithms, CSC102 Object Oriented Programming	1	Sanjay Chaudhary	11:00 am - 12:30 pm Tue, Thu
391	SEAS	CSP510 Advanced Wireless Communication	3		1	Dhaval Patel	08:00 am - 09:30 am Tue, Thu
392	SEAS	ECE209 Digital Design	4		1	Harmeet Kaur	10:00 am - 11:00 am Mon, Wed, Fri 01:00 pm - 02:00 pm Wed 02:00 pm - 03:00 pm Wed
393	SEAS	ECE209 Digital Design	4		2	Harmeet Kaur	10:00 am - 11:00 am Mon, Wed, Fri 02:00 pm - 03:00 pm Fri 01:00 pm - 02:00 pm Fri

394	SEAS	ECE209 Digital Design	4		3	Harmeet Kaur	10:00 am - 11:00 am Mon, Wed, Fri 02:00 pm - 03:00 pm Mon 01:00 pm - 02:00 pm Mon
395	SEAS	ECE210 Signals and Systems	3		1	Mehul Raval	09:30 am - 11:00 am Tue, Thu
396	SEAS	ECE302 Embedded Systems Design	3	CSE2XX Computer Organization and Architecture, ECE209 Digital Design	1	Anurag Lakhlani Sanket Patel	11:00 am - 12:30 pm Tue, Thu 01:00 pm - 02:00 pm Mon 02:00 pm - 03:00 pm Mon
397	SEAS	ECE302 Embedded Systems Design	3	CSE2XX Computer Organization and Architecture, ECE209 Digital Design	2	Anurag Lakhlani Sanket Patel	11:00 am - 12:30 pm Tue, Thu 01:00 pm - 02:00 pm Wed 02:00 pm - 03:00 pm Wed
398	SEAS	ECE302 Embedded Systems Design	3	CSE2XX Computer Organization and Architecture, ECE209 Digital Design	3	Sanket Patel Anurag Lakhlani	11:00 am - 12:30 pm Tue, Thu 01:00 pm - 02:00 pm Fri 02:00 pm - 03:00 pm Fri
399	SEAS	ECE310 Wireless Communications	3	MAT200 Linear Algebra,	1	Dhaval Patel	11:00 am - 12:00 pm Mon, Wed, Fri
400	SEAS	ECE502 VLSI Design	3	EVD210 Computer Organisation OR CSE2XX Computer Organization and Architecture	1	Mazad Zaveri	11:00 am - 12:00 pm Mon, Wed, Fri
401	SEAS	ECE504 Internet of Things	3	EVD220 Embedded System Design	1	Anurag Lakhlani	02:30 pm - 04:00 pm Tue 04:00 pm - 05:30 pm Tue

402	SEAS	ENR100 Visualisation	1.5		1	Bimal Das	09:30 am - 11:00 am
							Sat
							08:00 am - 09:30 am
							Sat
403	SEAS	ENR100 Visualisation	1.5		2	Maryam Kaveshgar	02:30 pm - 04:00 pm
							Sat
							04:00 pm - 05:30 pm
							Sat
404	SEAS	ENR100 Visualisation	1.5		3	Nitin Banker	11:00 am - 12:30 pm
							Sat
							01:00 pm - 02:30 pm
							Sat
405	SEAS	ENR101 Product Realisation	1.5	None	1	Anamika Maurya	09:30 am - 11:00 am
							Sat
							08:00 am - 09:30 am
							Sat
406	SEAS	ENR101 Product Realisation	1.5	None	2	Maryam Kaveshgar	01:00 pm - 02:30 pm
							Sat
							11:00 am - 12:30 pm
							Sat
407	SEAS	ENR101 Product Realisation	1.5	None	3	Keyur Joshi	02:30 pm - 04:00 pm
							Sat
							04:00 pm - 05:30 pm
							Sat
408	SEAS	ENR203 Material Science and	2		1	Mayuribala Mangrulkar	10:00 am - 11:00 am
		Engineering				Mayuribala Mangrulkar	Mon, Fri
409	SEAS	ENR203 Material Science and	2		2	Mayuribala Mangrulkar	10:00 am - 11:00 am
		Engineering				Mayuribala Mangrulkar	Mon, Fri
410	SEAS	ENR204 Mechanics of Rigid Bodies	2		1	Bimal Das	03:00 pm - 04:00 pm
		C C					Tue
							04:00 pm - 05:00 pm
							Tue
							01:00 pm - 02:00 pm
							Thu
							02:00 pm - 03:00 pm
							Thu

411	SEAS	ENR204 Mechanics of Rigid Bodies	2	2	Bimal Das	01:00 pm - 02:00 pm Sat 02:00 pm - 03:00 pm Sat 03:00 pm - 04:00 pm Sat 04:00 pm - 05:00 pm Sat
412	SEAS	ENR205 Thermodynamics-1	2	1	Sunil Kale Ramya Srinivasan	09:00 am - 10:00 am Mon, Wed, Fri 10:00 am - 11:00 am Wed
413	SEAS	ENR303 Introduction to Composites	3	1	Sham Gurav Naresh Sharma	09:30 am - 11:00 am Tue, Thu
414	SEAS	ENR305 Sensors, Instruments and Experimentation	2	1	Ashok Ranade	01:00 pm - 02:00 pm Mon 02:00 pm - 03:00 pm Mon 03:00 pm - 04:00 pm Mon 04:00 pm - 05:00 pm Mon
415	SEAS	ENR305 Sensors, Instruments and Experimentation	2	2	Vinod Mall	01:00 pm - 02:00 pm Thu 2:00 pm - 03:00 pm Thu 03:00 pm - 04:00 pm Thu 04:00 pm - 05:00 pm Thu

416	SEAS	ENR305 Sensors, Instruments and Experimentation	2		3	Sanket Patel	01:00 pm - 02:00 pm Fri 02:00 pm - 03:00 pm Fri 03:00 pm - 04:00 pm Fri 04:00 pm - 05:00 pm Fri
417	SEAS	ENR503 Machine Vision, Learning and Applications	3		1	Keyur Joshi	11:00 am - 12:30 pm Tue, Thu
418	SEAS	MAT101 Discrete Mathematics [Bi-Semester]	3		1	Eshita Mazumdar	09:30 am - 11:00 am Tue, Thu
419	SEAS	MAT101 Discrete Mathematics [Bi-Semester]	3		2	Mitaxi Mehta	11:00 am - 12:30 pm Tue, Thu
420	SEAS	MAT203 Differential Equations and Linear Algebra	3	None	1	Anamika Maurya	09:30 am - 11:00 am Tue, Thu
421	SEAS	MAT248 Applied Linear Algebra	3	MAT103 Calculus OR MAT142 Introductory Calculus OR MAT100 Calculus and Differential Equations OR MAT211 Mathematics for Management	1	Eshita Mazumdar	02:30 pm - 04:00 pm Tue, Thu
422	SEAS	MAT248 Applied Linear Algebra	3	MAT103 Calculus OR MAT142 Introductory Calculus OR MAT100 Calculus and Differential Equations OR MAT211 Mathematics for Management	2	Pravakar Paul	02:30 pm - 04:00 pm Tue, Thu
423	SEAS	MAT281 Multivariable Calculus	3		1	Mitaxi Mehta	10:00 am - 11:00 am Mon, Wed, Fri
424	SEAS	MAT281 Multivariable Calculus	3		2	Adarsh Ganesan Adarsh Ganesan	10:00 am - 11:00 am Mon, Wed, Fri
425	SEAS	MEC200 Kinematics and Structure of Machines	3	MAT200 Linear Algebra, MEC210 Strength of Materials	1	Akhand Rai	11:00 am - 12:30 pm Tue, Thu

426	SEAS	MEC301 Dynamics of Machines and	3	MAT203 Differential	1	Akhand Rai	09:30 am - 11:00 am
		Vibrations		Equations and Linear			Tue, Thu
427	SEAS	MEC302 Design, Materials and Manufacturing	4	ENR203 Material Science and Engineering, ENR204 Mechanics of Rigid Bodies, MEC0000 Materials and Process of Manufacture, MEC330NEW Computer Aided Design and Manufacturing, ENR100 Visualisation, ENR101 Product Realisation	1	Shuja Ahmed	01:00 pm - 02:00 pm Tue 02:00 pm - 03:00 pm Tue 11:00 am - 12:00 pm Mon, Wed, Fri
428	SEAS	MEC403 Manufacturing Systems and Operations	2	MEC0000 Materials and Process of Manufacture	1	Keyur Joshi	10:00 am - 11:00 am Mon, Wed
429	SEAS	MEC404 Integrated Mechanical Laboratory II	2		1	Sunil Kale Sunil Kale	01:00 pm - 02:00 pm Tue 02:00 pm - 03:00 pm Tue 03:00 pm - 04:00 pm Tue 04:00 pm - 05:00 pm Tue
430	SEAS	MEC405 Learning Factory Project	3		1	Shuja Ahmed	01:00 pm - 02:00 pm Mon, Thu 02:00 pm - 03:00 pm Mon, Thu 03:00 pm - 04:00 pm Mon, Thu
431	SEAS	MEC510 Automobile Engineering	3		1	Nitin Banker	09:00 am - 10:00 am Mon, Wed, Fri
432	SEAS	PHY711 Introduction to General Relativity	3	None	1	Pankaj Joshi	01:00 pm - 02:30 pm Tue, Thu
433	SEAS	PHY713 Special Topic : Introduction to Cosmology	3	None	1	Gaurav Goswami	11:00 am - 12:30 pm Mon, Wed

434	Undergraduate College	FDP101 Democracy and Justice	3	None OR None	1	Darshna Padia Charu Singh Pooja Shah Raghwinder Singh Vinod Mall Purabi Bhattacharya	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
435	Undergraduate College	FDP101 Democracy and Justice	3	None OR None	2	Vedant Dev Nimit Thaker Keita Omi Lakshmi Sreeram Noopur Thakur Preeti Maneck	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
436	Undergraduate College	FDP101 Democracy and Justice	3	None OR None	3	Darshna Padia Charu Singh Pooja Shah Raghwinder Singh Vinod Mall Purabi Bhattacharya	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
437	Undergraduate College	FDP101 Democracy and Justice	3	None OR None	4	Vedant Dev Nimit Thaker Keita Omi Lakshmi Sreeram Noopur Thakur Preeti Maneck	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
438	Undergraduate College	FDP101 Democracy and Justice	3	None OR None	5	Darshna Padia Charu Singh Pooja Shah Raghwinder Singh Vinod Mall Purabi Bhattacharya	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu

439	Undergraduate College	FDP101 Democracy and Justice	3	None OR None	6	Vedant Dev Nimit Thaker Keita Omi Lakshmi Sreeram Noopur Thakur Preeti Maneck	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
440	Undergraduate College	FDP101 Democracy and Justice	3	None OR None	7	Darshna Padia Charu Singh Pooja Shah Raghwinder Singh Vinod Mall Purabi Bhattacharya	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
441	Undergraduate College	FDP101 Democracy and Justice	3	None OR None	8	Vedant Dev Nimit Thaker Keita Omi Lakshmi Sreeram Noopur Thakur Preeti Maneck	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
442	Undergraduate College	FDP102 Environment and Climate Change	3	None OR None	1	Aditya Vaishya Jinal Parikh Soumen Ghosh Subhash Rajpurohit Manjil Saikia Tana Trivedi	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
443	Undergraduate College	FDP102 Environment and Climate Change	3	None OR None	2	Keyur Joshi Arijit Ganguli Bhuvan Pathak Binny Rawat Guillaume Wadia Kunal Mankodi	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu

444	Undergraduate College	FDP102 Environment and Climate Change	3	None OR None	3	Aditya Vaishya Jinal Parikh Soumen Ghosh Subhash Rajpurohit Manjil Saikia Tana Trivedi	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
445	Undergraduate College	FDP102 Environment and Climate Change	3	None OR None	4	Keyur Joshi Arijit Ganguli Bhuvan Pathak Binny Rawat Guillaume Wadia Kunal Mankodi	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
446	Undergraduate College	FDP102 Environment and Climate Change	3	None OR None	5	Aditya Vaishya Jinal Parikh Murari Jha Soumen Ghosh Subhash Rajpurohit Manjil Saikia	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 1:30 pm - 04:00 pm Mon, Tue, Thu
447	Undergraduate College	FDP102 Environment and Climate Change	3	None OR None	6	Keyur Joshi Arijit Ganguli Bhuvan Pathak Binny Rawat Kunal Mankodi Suchismita Das	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
448	Undergraduate College	FDP102 Environment and Climate Change	3	None OR None	7	Aditya Vaishya Jinal Parikh Murari Jha Soumen Ghosh Subhash Rajpurohit Manjil Saikia	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu

449	Undergraduate College	FDP102 Environment and Climate Change	3	None OR None	8	Keyur Joshi Arijit Ganguli Bhuvan Pathak Binny Rawat Kunal Mankodi Suchismita Das	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
450	Undergraduate College	FDP103 Neighbourhoods	3		1	Prithwiraj Mukherjee Samarth Gupta Souvik Sen Gupta Sujo Thomas Shilpa Pandit	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
451	Undergraduate College	FDP103 Neighbourhoods	3		2	Bhargav Adhvaryu Loyimee Gogoi Mahendra Singh Rao Ratna Ghosal Sudhir Pandey Susanta Tewari	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
452	Undergraduate College	FDP103 Neighbourhoods	3		3	Prithwiraj Mukherjee Samarth Gupta Souvik Sen Gupta Sujo Thomas Shilpa Pandit	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
453	Undergraduate College	FDP103 Neighbourhoods	3		4	Bhargav Adhvaryu Loyimee Gogoi Mahendra Singh Rao Ratna Ghosal Sudhir Pandey Susanta Tewari	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
454	Undergraduate College	FDP103 Neighbourhoods	3		5	Prithwiraj Mukherjee Samarth Gupta Souvik Sen Gupta Sujo Thomas Shilpa Pandit	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu

455	Undergraduate College	FDP103 Neighbourhoods	3	6	Bhargav Adhvaryu Loyimee Gogoi Mahendra Singh Rao Ratna Ghosal Sudhir Pandey Amol Agrawal	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
456	Undergraduate College	FDP103 Neighbourhoods	3	7	Prithwiraj Mukherjee Samarth Gupta Souvik Sen Gupta Sujo Thomas Shilpa Pandit	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
457	Undergraduate College	FDP103 Neighbourhoods	3	8	Bhargav Adhvaryu Loyimee Gogoi Mahendra Singh Rao Ratna Ghosal Sudhir Pandey Amol Agrawal	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
458	Undergraduate College	FDP104 Water	3	1	Ashutosh Kumar Adarsh Ganesan Aditi Deo Chirag Trivedi Hetal Jhaveri Jayendra Bhalodiya	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
459	Undergraduate College	FDP104 Water	3	2	Saptam Patel Ashim Rai Dharamashi Rabari Jatin Christie Ramya Srinivasan Vivek Bhatt	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
460	Undergraduate College	FDP104 Water	3	3	Ashutosh Kumar Adarsh Ganesan Aditi Deo Chirag Trivedi Hetal Jhaveri Jayendra Bhalodiya	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu

461	Undergraduate College	FDP104 Water	3	4	Saptam Patel Ashim Rai Dharamashi Rabari Jatin Christie Ramya Srinivasan Vivek Bhatt	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
462	Undergraduate College	FDP104 Water	3	5	Aditi Deo Adarsh Ganesan Chirag Trivedi Hetal Jhaveri Jayendra Bhalodiya Shomen Mukherjee	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
463	Undergraduate College	FDP104 Water	3	6	Saptam Patel Ashim Rai Dharamashi Rabari Jatin Christie Ramya Srinivasan Vivek Bhatt	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
464	Undergraduate College	FDP104 Water	3	7	Aditi Deo Adarsh Ganesan Chirag Trivedi Hetal Jhaveri Jayendra Bhalodiya Shomen Mukherjee	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu
465	Undergraduate College	FDP104 Water	3	8	Saptam Patel Ashim Rai Dharamashi Rabari Jatin Christie Ramya Srinivasan Vivek Bhatt	09:45 am - 12:30 pm Mon, Tue, Wed, Thu, Fri 01:30 pm - 04:00 pm Mon, Tue, Thu

Course Descriptions Monsoon Semester 2023

Amrut Mody School of Management

CAP698 - Capstone Project Credits: 6

COM100 - Elements of Academic Reading and Writing Credits: 3

This is an elementary reading and writing course in a series of core communication courses offered by the University to aid students' linguistic development. The course is designed to help students read critically and write effectively and to develop in them an awareness of grammar and writing style which will enable them to self-edit their writing. This course will also prepare students for the advanced communication courses offered by the University. In addition to the 26 sessions, there is a 'Conversation Lab' (10 Sessions) that is mandatory for the students enrolled in COM 100 to attend.

COM101 - Effective Reading and Comprehension Skills Credits: 3

COM101 is the intermediate level of the university's communication courses designed to promote linguistic and academic development. This is a reading and comprehension course to train students to develop general competence and advanced analytical strategies in reading. This course prepares students to communicate in English at the level required for success in their core courses and beyond graduation.

COM102 - Advanced Writing Credits: 3

This is an advanced writing course to train

students in writing for academic and formal contexts. The modules of the course are designed to result in predefined writing outcomes with separate modules to address the writing requirements of the different Schools.

COM114 - Understanding Culture Credits: 3

In academic institutions focusing upon technology. management. commerce and are rare. Very discussions of 'culture' occasionally when 'culture' does figure, it has a designated space, isolated from the everyday permeation of culture in just about everything we see or do. Through a series of illustrations from media, art, rituals on one hand and ordinary situations when the 'cultural' asserts itself both overtly and covertly, on the other hand, the course hopes to make students aware of every situation that has a cultural dimension even when we least expect it to be.

COM115 - Gender Sensitization Credits: 3

Gender is often (mis)understood as a set of concerns of and about 'women' and unfortunately in several discussions and considerations does not clearly include men or gays, transgender persons, lesbians or intersex. Alongside working on the expansive range of what we mean by 'Gender', it is also imperative that discussions on everydayness of being a gender and becoming a gender are encouraged. Beyond awareness, the course intends to tickle the psyche and conditioning of the participants so as to make them agents of behaviour change - to contribute towards steering society that is more genderequal and equitable.

COM201 - Effective Workplace Communication Credits: 1.5

Organizations are seen as communicative structures where communication constitutes routine job activities. In this sense, organisations are not merely seen as a place where communication happens, but it exists because employees communicate and create the sense in the existing structure. Also, the idea of the workplace has moved beyond the simple "office space" to "living social networks" that combine work, home and play. Moreover, organisations use their website and social media to communicate with internal and external stakeholders. Viewed, thus, in this context, the course looks at the constitutive view of communication and intends to familiarise students with workplace communications as practised in the corporate world. The course is interdisciplinary and involves the combination of concepts (communication, sociology and computer-mediated technology) into one project.

COM202 - City as Text Credits: 3

In human history, the city has existed both as an idea and a place. Also, cities often develop around very different purposes. For instance, some cities become the space for national and international political activities, and some become the hub for business and trade. Other cities are primarily seen as sites for tourism and leisure. However, apart from these images, a city is also subject to continuous change—such as political, cultural, social and religious—which affect the lifestyle of city-dwellers and the image of a city from time to time. Viewed, thus, in the above perspective, City as Text course broadens the idea of a text as a

landscape which includes cultural artifacts, institutions, and street cultures, socio-political and economic discourses. This course is interdisciplinary (provides economic perspective, cultural landscape analysis, political and social analysis, and historical background) and would mainly focus on urban formal and informal spaces such as commercial, residential and public. Learning processes in this course are characterized in three main ways: •Firstly, intellectual development - understanding the specific socio-economic, cultural, and political factors that have shaped the city and the integration of theoretical and practical concepts. The urban environment enables a variety of different modes of learning, including guided student discovery and interpretation. •Secondly, technical development - students have the opportunity to hone observation and analytical skills, and competence in information processing and research, as they are brought into direct firsthand contact with the object of their investigation. And as an arena of encounter and interaction, the urban environment facilitates processes of personal development. •Finally, with the help of digital humanities pedagogy, students will be able to study the intersection between technology and the human experience using the digital tool. This pedagogy will help students to learn the nuances of computing methods to do humanities research.

COM210 - Science Communication using Digital Media Credits: 3

This course in science communication is designed to introduce students to the field of science writing and digital scientific illustrations. Science and technology have enabled strides toward better health and lifestyles, but daunting threats to the climate, environment and well-being demand more research and public attention. Although scientists influence policy and public perceptions, the news media are the primary way the public learns about complexities and understand successes and failures. By striving for excellence in writing and reporting about climate and health, students will join the public discourse on some of the most crucial issues of the day, help educate the public, and contribute ideas to improving the planet.

COM212 - Digital Humanities Credits: 3

Digital Humanities (DH) is the intersection between humanities, technology, design and data analysis. It brings the power of computational analysis to problems and possibilities in humanities and related disciplines. This course aims to inform students of trans disciplinary research being undertaken within the purview of DH to equip them with the ability to hypothesise and 'critically-make' new media projects. The students are expected to incorporate a 50:50 ratio in their study of theory and implementing solutions hands-on. Students will be guided to prototype solutions that bridge their primary field of study with the Humanities. The course will result in the culmination of a final project answering a research question. Students will engage closely in a project that results in the culmination of a DH-platform as part of their evaluation. The tools that will primarily be used are Python, Google Collab, miscellaneous Open Access methods for text, network, spatial analyses will be encouraged. Students need not have any prior knowledge of these tools to register for this course. The coursework would broadly involve the creation of a data essay, a piece of alternative or multimodal writing and towards the development of an Open Access digital platform

to highlight digital scholarship in Indian galleries, libraries, archives and museums (GLAM) for the general public.

COM501 - Managerial Communication Credits: 1.5

The mature students of MBA are expected to have basic knowledge in corporate communication. However, communication is one of those basic skills, which require constant improvement to suit the changing business environment. To provide the context for the corporate simulation, students have to join "AMCC Ltd" (a virtual company created for the course). Students are expected to perform various relevant on-the-job tasks for AMCC Ltd from the first day of the course. The course intends to provide essential communication skills such as listening, feedback, email writing, proposal writing, interpersonal sensitivity and presentations in a corporate culture context.

COM506 - Culture and Communication Credits: 1.5

Every environment whether it is social, political or organizational has its own culture. When this environment meets the geographical boundaries of different cities, regions, countries, etc. a set of cultural value system, practices and its identity are developed. This course looks at the close relationship between culture and the role of communication in bearing it, the points of conflict between a culture and the globalized world, the role of culture in the world of business, etc. with a special focus on cultural behavior in sub-cultures in India and communication styles of working professionals

COM507 - Communication Lab I

Credits: 0.75

A successful professional in the present context believes in creating change by communicating thoughts effectively. Also, the world has been disrupted significantly, but effective communication remains a core element of business. The ability to communicate confidently and persuasively is critical to business success. This may seem more challenging to execute in the digital world, but the need is even more crucial than ever. Communication Lab aims to transform students from good communicators to effective one. Over the two years of their MBA degree, students will learn various strategies to enhance their speaking abilities and learn techniques to communicate in the virtual world effectively. Through hands-on activities, students will realise who they are as a person and the value of their words and body language. The Lab activities include group work, role-plays, individual speech analysis, and body language analysis. The emphasis of the Communication Lab is on helping students reflect on their styles and strategies rather than adopting others' traits.

COM511 - Journalism and Media Management Credits: 1.5

COM701 - Research Writing Credits: 3

This is a course to train young and early career researchers in the art of research writing. It takes students through the different aspects of academic writing, beginning from abstracts, reviews, research proposals and writing for a popular audience. It also trains students in presentation and oral skills, to equip them to showcase, explain, and argue about their research to a diverse audience, both lay and specialist.

DES101 - Fundamentals of Design Credits: 3

Fundamentals of design course provides an introduction in the field of design and its crossdisciplinary applications in industry and society. The intent is to give a foundation in design to students enrolled in any programme at the University by exposing them to the basic design fundamentals - principles, methods, processes and approaches. The course will expose the students to the user-centric approach that design adopts to address local and global challenges. They will learn to recognise that design is exploratory in nature and helps navigate ambiguity. It promotes new ways of looking at problems and coming up with solutions which are human-centered and inclusive. With practical exercises, the course will give an overview of the critical design thinking used for problem identification and opportunity mapping in any given context. Students will gain an understanding of design as a creative problemsolving tool to come up with holistic solutions for products, services, systems and experiences. The course is expected to rouse a student's interest in design. It will equip them with the necessary grounding to pursue design as a higher education or career pathway. Importantly, it will add a richer and diverse perspective to their understanding of their own field of Major education be it management, technology, sciences, humanities or social sciences. This course is open for students who are admitted to any programme at the University

DES102 - Visual Communication and Graphic Design Credits: 3 Visual/Creative communication in the digital age requires familiarisation and literacy that goes way beyond – beyond traditional practices. Digital is no longer a grey area. It becomes inevitable that the brand language be effectively transformed from one media to another without changing the brand image. Throughout this course, the focus would be to expose students to ideas, applications, experiences and opportunities that are relevant to today's times. This course is primarily about creating visual artefacts that communicate effectively, but that does not mean you need to be an artist to succeed. Assessment will focus upon your efforts and your willingness to engage with your classmates to provide feedback and learn from one another. The more time you spend with the exercises in this course, the more skills you will develop as a visual communicator. Take the time to explore each exercise, take risks, and reiterate often. Don't allow your first attempt at any solution to be your only attempt. Fail early and fail often. Learning what doesn't work is an essential process in understanding what does work. This course is open for students who are admitted to any programme at the University.

DES103 - Biomimicry With Playfulness Credits: 3

Nature is the best example of good design. Taking inspiration from nature has been an important part of human evolution. There are many examples of good designs which have been inspired by nature. Biomimicry is studying elements from nature: form, colour, function, movement, life cycle, growth, etc. and using it as an inspiration for designing products, spaces, visuals for communication, systems, etc.Today in our modern world and our way of life, we are moving away from our natural connection with nature. It is all the more critical that we study its various inspects to learn and use it as an inspiration for good design. The whole area of Biomimicry, Bionics, etc, has developed a lot and there is a lot more awareness about this field in current times. Toys are also recognized today as playing an important role in learning, development, building cultural connect and socio-emotional bonds and as part of the entertainment sector. Toys are a part of unstructured play and a means to create playful experiences. In this course, we will study nature with a new perspective and explore possibilities of using it to ideate and design toys or playful elements.

DES201 - Strategic Branding and Packaging Design Credits: 3

Brands exist in the consumers' minds and yet entice them to act as if it were a relationship of the heart. Brands often look for top-of-mind recall, but branding is an emotional connection that the audience forms with the brand and its message thereby creating a loyal following. It is not what you think and says but what they (the audience) perceive and believe. Therefore, branding is a function of strategy and psychology that embeds various facets of design in it. This course is designed to cover the fundamentals of branding and packaging to sensitize you to the decisionmaking process required to create a cohesive brand language. In a world dominated by brands, it is important to understand the key differentiating factor and then build an experience around it. Strategic Packaging design directly contributes to building a brand image by functional or aesthetic elements or by reinforcement of brand image by giving out an experience. This course will offer the tools and techniques required to formulate the right strategy for success. The pedagogy consists of interactive

sessions with a healthy mix of fundamental theory, case studies, on the spot, and group assignments for hands-on learning. Your key takeaway from this course will be the ability to make smart decisions for building a successful brand image and a long-term plan for a lasting brand impression.

DES202 - Interaction Design and User Experience Credits: 3

Interaction design is the practice of designing interactive digital products, environments, systems, and services. Ideally, interacting with technology would be as easy and intuitive as interacting with other humans. So, why do so many products and services fail to achieve this ideal? All products, whether digital or otherwise, must deliver a high-quality user experience or risk losing users to competitors. The focus of interaction design is on user-centred design based on the understanding of real users including their experiences, goals, needs, wants and tasks. The goal of interaction design is also to collect and analyse data to make informed interface design decisions which are critical to creating and delivering successful products, services and systems that fulfil the user/customer, technological and business needs.

DES203 - Design Thinking and Problem Solving Credits: 3

Design thinking is a methodology for creative problem-solving. Design Thinking provides a solution-based approach in tackling complex problems that occur around us by understanding human needs and re-framing the problems and solutions in human-centric ways keeping the business requirements in mind. It helps to adopt a hands-on approach to prototyping and testing. Companies globally are competing based on customer experience. Design thinking has gained momentum in the business world's leading companies as they have embraced it to improve their customer experiences. Design Thinking induces a deep human-centric understanding to deliver delightful client experiences through the quick iteration of ideas and solutions.

DES301 - Design Project Credits: 6

The Design Project is a culminating experience for an individual student/interdisciplinary group of students in their final year, where they apply the learnings gathered during the elective design courses to solve a real-world problem. The project aims to use creative and innovative techniques to create better products, services, systems, processes, strategies, and experiences that meet existing or previously unidentified needs. The students will understand human needs and re-frame the problem in human-centric ways. Apply critical design thinking for problem identification and opportunity mapping in any context. They will research from the user, task, environment and company perspective and create profiles and personas. The project will create a proof of concept, mock-up or prototype, which can be tested to verify the problem solution.

DGT101 - Digital Futures: Technologies and Transformations Credits: 1.5

This course provides an introduction to the sociopolitical and economic realities of information communication technology (ICT) of entertainment and commerce in India. The course will explore how the emergence of ICT has impacted various sectors of Indian society and economy, such as media, entertainment, and ecommerce, and how it has transformed the way people consume and access information. Through a series of case studies, students will examine the socio-economic and cultural implications of ICT in India and critically analyze the opportunities and challenges associated with its use.

DGT201 - Interactive Media and Visualisation Credits: 3

The course introduces students to interactive media and visualisation techniques through hands-on projects and practical exercises. Students will learn various digital and Generative AI tools for creating interactive media, visualisation, and digital exhibits for knowledge dissemination in a peer-to-peer context and public communication. Students will delve into various forms of interactive media, including creating timelines, graphs, network maps, non-linear interactive text stories, 360 walkthroughs, websites and visualisation dashboards. The course will introduce students to creative coding. enabling them to craft custom visualisations, animations, and generative art. By engaging in these projects, students will understand how to effectively convey information in an interactive and visually engaging manner for projects.

ECO100 – Microeconomics Credits: 3

Microeconomics is an introductory undergraduate course aimed at teaching the fundamentals of microeconomics by introducing the students to concepts like supply and demand analysis, elasticity, theory of consumer choice, producer theory, market structure, competition, welfare and public goods. Students will also be introduced to the use of microeconomic applications to real world issues. This course is a core subject across the University undergraduate programs. It is an introductory course aimed at preparing students for understanding advanced economics as well as other related subjects of business and social sciences.

ECO110 – Macroeconomics Credits: 3

Macroeconomics describes how the economy as a whole functions and policies are formulated. The purpose of the course is to acquaint students with the basic concepts and theories of macroeconomics and orient them towards linkages between various economic indicators.

ECO200 - Managerial Economics Credits: 3

This course provides an overview of economic tools and analytical approaches that form the core toolkit for informed managerial decisions. Topics covered include, inter alia, demand analysis, production and cost analysis, pricing, game theory, asymmetric information, and policy analysis. The course will rely on regression analysis and basic calculus techniques to formalize the key concepts. The economic tools and concepts developed in this course are indispensable for managerial decisions in a data driven business environment. This course is designed for students with no background in economics and aims to be an introductory course in managerial economics.

ECO201 - Intermediate Microeconomics Credits: 3

The course will cover consumer theory, producer theory and various aspects of market failure.

ECO203 - Experimental and Behavioral Economics Credits: 3

This introductory course introduces students to the methods of lab and field experiments and the behavioural principles and theories of human decision making. Against the backdrop of Neoclassical Economics, this course will discuss deviations from the standard concepts of individual preferences, beliefs, and decisionmaking processes. In doing so, we will see that people are loss-averse, present-biased, more social, and often use heuristics in their decisionmaking. Experimental evidence from education, labour, health, public economics/finance and management will elucidate these ideas. Students will also learn to create and implement experiments using the open-source platform, oTree. More broadly, this course will provide students with an overview of how researchers and policymakers have leveraged their understanding of behavioural and experimental economics to improve economic, policy and management outcomes. Considering that this is an introductory course, the theory and experiments will be discussed with a greater focus on intuition and a lesser emphasis on the technicalities.

ECO212 - Intermediate Macroeconomics Credits: 3

This is an intermediate level macroeconomics course for students who are well acquainted with the basics of the subject. It covers the traditional models essential to understand how the economy functions in the short run, medium run and long run. The short and medium run analysis focuses on the goods market and money market equilibrium along with labour market using IS-LM-PC model. For the long run analysis, students are introduced to the Solow-Swan growth model. Later the course introduces the micro founded approach to macroeconomics and how that can be utilized to explain economic fluctuations and monetary policies. Since much of the current research and policy-making uses macroeconomic models with detailed micro foundations, it is an excellent opportunity for students to study such models.

ECO220 - Econometrics Credits: 3

This course introduces students to the modern econometric techniques used to conduct empirical analysis in Economics. The course is designed to provide the students with the basic quantitative techniques needed to undertake applied research projects. Students will be introduced to both theoretical and applied econometrics so that by the end of this course, they can apply the formal theories they learn to analyse complex real-world problems. Students will also need to use an econometric software package, STATA, and different datasets in this course. This will enable them to learn and explore multiple estimation and forecasting techniques. Finally, the course also provides the base for more advanced optional courses in econometrics.

ECO250 - History of Economic Thought Credits: 3

The 2008 crisis led to several questions over economics pedagogy. Economics was increasingly seen as one-dimensional with one school dominating the thinking behind everything from pedagogy to policy. Economics is hardly a one dimensional subject and has several schools which fight, compete and shape ideas. A strong need was felt that students should undergo courses in history of economic thought which presents economics from a multidimensional and pluralistic perspective. This course on History of Economic Thought discusses how several thinkers and philosophers shaped economics theories and ideas overtime. The course discusses the origins of our current theories. Though, the course focuses mainly on Western Economic Thought, we will cover Indian Economic Thought as well.

ECO280 - Indian Economy: Performance and Policies Credits: 3

The course introduces students to critical aspects of India's economic performance across all the sectors and over a period of time. It discusses the economic and sectoral growth trajectory of India in the context of various policy announcements. The course shall bring in critical analysis of policies such as economic reforms announcement of 1991, agriculture policies, industrial policies, policy for service sector and trade, policies related to population, employment and poverty etc. The course will also bring the debate around the economic reform package announced during Covid 19. The course shall access the Indian economy data sets for the discussion.

ECO300 - Models of Political Economy Credits: 3

This course attempts to find answers of questions like what determines the size and target beneficiaries of public goods, welfare programs,

taxation policies, effect of corrupt public officials, politician-industrialist nexus, electoral-cycles on economic policies. The course takes a positivist approach of explaining economic policymaking, assuming all agents are rational and behave strategically, focusing on various kinds of incentives and constraints the policy-makers face under different political systems. The course will cover topics like Probabilistic Voting, Median Voter's Theorem, Downsian Model of Electoral Competition, politics of redistribution over pensions and unemployment insurance, politics of special interest over local public goods and lobbying, separation of power through political institutions, presidential versus parliamentary political regimes etc.

ECO500 - Economics For Managers Credits: 3

This course provides an overview of economic tools and analytical approaches that form the core economic toolkit for a manager to make informed business decisions. Topics covered include, inter alia, demand analysis, production and cost analysis, pricing, asymmetric information, aggregate variables, and macroeconomic policy. The economic tools and concepts developed in this course are indispensable for managerial decisions in a data driven business environment. This is a core course for MBA students and aims to prepare them to take advanced courses in other management disciplines.

ECO501 - Intermediate Microeconomics Credits: 3

The first part of the course will cover consumer theory. The second part will consist of producer theory and general equilibrium.

ECO503 - Experimental and Behavioral Economics Credits: 3

This introductory course introduces students to the methods of lab and field experiments and the behavioural principles and theories of human decision making. Against the backdrop of Neoclassical economics (specifically Expected Utility Theory), this course will discuss deviations from the standard concepts of individual preferences, beliefs, and decision-making processes. In doing so, we will see that people are loss-averse, present-biased, more social, and often use heuristics in their decision-making. Experimental evidence from education, labour, economics/finance health. public and development economics will elucidate these ideas. More broadly, this course will provide students with an overview of how researchers and policymakers have leveraged their understanding of behavioural and experimental economics to study and find solutions to fix undesirable or less desirable individual decisions (from a social planner's perspective). Considering that this is an introductory course, the theory and experiments will be discussed with a greater focus on intuition and a lesser emphasis on the technicalities. The mathematical technicalities, along with the fine details behind the design of an experiment, could be worked upon in a more advanced level course on experimental and/or behavioural economics.

ECO507 - Models of Political Economy Credits: 3

• Do markets work perfectly in the real world? • When do markets fail? What happens when markets fail? • Can markets exist without

Government intervention in the real world? • Economics is largely about Government Policy-Welfare, Tax, Redistribution etc.• The core question prevails- who gets what, and how much?• All economic theories contain political value judgement. This course attempts to explain economic policies in modern democracies, exploring the interface of economics and political science. The course aims to introduce contemporary tools of economic policy making to expose the students to the current literature of formal economic modeling. This course attempts to find answers of questions like what determines the size and target beneficiaries of public goods, welfare programs, taxation policies, effect of corrupt public officials, politician-industrialist nexus, electoral-cycles on economic policies. The course takes a positivist approach of explaining economic policymaking, assuming all agents are rational and behave strategically, focusing on various kinds of incentives and constraints the policy-makers face under different political systems.

ECO511 - Intermediate Macroeconomics Credits: 3

This is an introductory course on macroeconomics designed for Master level students. In this course, we will study theoretical building blocks of macroeconomics. It aims to provide a basic and comprehensive understanding of the key fundamental concepts and topics necessary to understand an economy as a whole. In addition to introducing the various economic concepts like GDP, inflation, unemployment, interest rates etc., we will also understand their inter-linkages. For this purpose, we will study various markets that operate in any economy, viz., goods, money, capital, and labor markets. And, look at their interdependencies using a narrative-based approach where concepts will be revisited as and when required in order to complete the understanding loop. Though there will be mathematical representation using equations and graphs. But the focus will be more on intuition in terms of understanding the underlying behavior which results in those representations.

ECO544 - Urban Informal Economy Credits: 1.5

This is a policy oriented course that aims to provide an overview of theoretical debates and empirical evidence on the urban informal economy. It emphasizes policy and programmatic responses to the informal economy. The informal (unorganized) economy contributes about 60 percent of GDP and employs about 92 percent of the workforce (including agriculture). Small enterprises and labour are struggling to remain afloat and competitive in the current context of globalization and the pandemic crisis. The course is designed to provide an understanding of the informal economy and its various segments. An exposure to the nature of difficulties faced in doing business by enterprises in the sector would help analyze available policy options.

ECO550 - History of Economic Thought Credits: 3

The 2008 crisis led to several questions over economics pedagogy. Economics was increasingly seen as one-dimensional with one school dominating the thinking behind everything from pedagogy to policy. Economics is hardly a one dimensional subject and has several schools which fight, compete and shape ideas. A strong need was felt that students should undergo courses in history of economic thought which presents economics from a multidimensional and pluralistic perspective. This course on History of Economic Thought discusses how several thinkers and philosophers shaped economics theories and ideas overtime. The course discusses the origins of our current theories. Though, the course focuses mainly on Western Economic Thought, we will cover Indian Economic Thought as well.

ECO699 - Dissertation Credits: 3

EFB101 - Introduction to Entrepreneurship Credits: 1.5

This is an undergraduate level course intended to create awareness about basic entrepreneurial skills. It is for an audience that plans to be involved in new-venture creation or take the existing venture further, be it a small business, family business or a turnaround. The focus will be on the formulation and implementation issues that relate to conceptualizing and developing ventures. It is meant to expose the audience to the world of entrepreneurship and trigger entrepreneurial interest. In this way the course will try to achieve twin purposes: generating entrepreneurial interest and to motivate participants to become informed entrepreneurs.

EFB499 - Undergraduate Dissertation Credits: 6

EFB502 - Design Thinking Credits: 1.5

Design and design thinking are aimed at one primary goal above everything else – improvement of the quality of life. Design is a set of activities and processes to bring about this improvement and beneficial change on their own.

Design Thinking is a set of activities and processes to let design happen on its own. It is aimed at making designerly behaviour a very core mindset and body set. Design Thinking in the modern context is recognised as a core business activity which is capable of enhancing all activities around it, making them better and more human and consequently profitable as well. Over the years, it has developed as a very robust and ever-evolving combination of design, science, human behaviour and business principles. At the centre of this is the target user for whom systems are built to understand them, empathise with them define their problems and help them solve these problems through strategically targeted design interventions. Ultimately, all business is about the people who invest in it through one or the other level of consumer behaviour. Design Thinking is aimed at giving business thinkers, a very deeply strategic advantage in the market. The proposed course is an introduction to Design Thinking which is delivered through a set of 14 sessions, discussions, and structured assignments that help internalise these basic concepts. Several minor assignments and a major project serve as a vehicle for participative action that is central to the understanding of Design Thinking as applied to imaginative business models while understanding four key aspects - context, intent, recipients of the design and the system involved.

EFB508 - Intellectual Property Rights Credits: 3

Intellectual Property Right is an important part of organization strategy for organizations ranging from commercial companies to non-profits like education and research institutions. It is also important for individuals who create any original work, be it in the scientific, literary, or cultural domain. Intellectual property rights are considered monopolistic rights, but the monopoly is a limited one as the IPRs will go in the public domain after a certain stipulated time. The ethical implications of the IPRs will be discussed and deliberated during the course through various case studies where monopolistic presence versus the social benefits are in conflict especially pharmaceutical products and/or utilitarian goods. The course will familiarize students with the popular types of intellectual properties and the legal provisions related to them and the administrative remedies which can be sought for. With the advent of technology, intellectual property protection has become a challenge due to piracy. The course deals with the technological solutions to the sustainable inventions and whether they can be protected through IPRs or not he course also looks into the contemporary issues of Intellectual Property rights in the global context. The course will also provide insight into the competitive and strategic advantages of enterprises by using Intellectual Property Rights.

EFB511 - Family Business Management and Policies Credits: 1.5

The predominance of Family Businesses in India is too obvious to bear re-iteration. Although internationally, Family Businesses have received attention from scholars, this area is still in its early days as far as India-specific research is concerned. This course focuses on various issues in Family Business Management, particularly in the Indian context. Beginning with a broad overview of the Socio-historical context of business in India, it goes on to discuss characteristics of family businesses and their peculiarities. The issues discussed in the course are – special characteristics of Family Businesses, the role of professionals in family business, family & business governance, areas of conflict between generations and succession planning.

EFB512 - Succession Planning and Professionalization Credits: 1.5

The course is directed towards students who will enter into the management of family businesses, either their own family's or someone else's, and students who will do business with family firms, consult to them, mergers and acquisitions, etc. The focus is on small and mid-size firms. It is assumed that the students opting for this course will have some familiarity with the basic issues in Family Business Management. The course deals in some detail with the two most significant areas of concern in Family Business Management (for practitioners and academicians alike) i.e. Professionalising of Family Business and Succession Planning in Family Business.

EFB602 - New Venture Creation Credits: 1.5

This course provides a broad-based introduction to entrepreneurship. The course activities will include evaluating commercial potential of business ideas and opportunities, researching markets and competition, understanding the importance of patents and copyrights, developing a business plan, acquiring resources, avoiding pitfalls, and financing the start-up. Participants in the course will explore the mind-set, considerations, realities, and real-world methods associated with the process of launching a new enterprise. Whether simply desiring to learn more about entrepreneurship or desiring to launch an enterprise, the course will provide know-how and tools to be more effective in the entrepreneurial process. This is a team-based course that will

permit groups of students to develop portions of a business presentation piece-by-piece. Both team and individual assignments will be required. A team project focused on the creation of an investor overview for a new business opportunity (including backup slides equivalent to preparing most of a business plan) will comprise a major part of the course.

EFB608 - Intellectual Property Management Credits: 1.5

This is an advanced course where learners will apply the principles of Intellectual Property Rights and know how to manage various Intellectual Property Rights. The course aims to look at both – creator/innovator/inventor's perspective and the organizational perspective as to how and why to manage the Intellectual Property Rights Portfolio. This course always aims to inform learners about the transmission of the IPR to third parties by way of License or Assignment. Enforcement of IP is also important for any organization which is also part of this course. Thus, this course deals with the IP Management and IP Enforcement Mechanisms

EFB609 - Business Expansion and Growth Credits: 1.5

This is a hybrid course on business expansion and growth, having 3 live sessions by experts from the industry as arranged by the Ahmedabad University and 10 self-study sessions as offered by Santa Clara University (SCU), California. There will be a doubt solving session jointly administered by Ahmedabad University faculty and SCU faculty at the end of the course. Business Expansion is a phase of business cycle where the owner needs to have appropriate expansion strategies in place so that he/she can grab better opportunities by leveraging the existing products, knowhow, infrastructure and goodwill. Different forms of business expansion include growing by duplication, buying another business or franchise, inviting public funds, integrating vertically, expanding globally, or even by selling the existing business. However, the challenge lies in knowing the best suited option. This course deals with all of the above options, their pros-cons and risks associated with each of them. Upon successful completion of the course, students will receive a joint certificate from Santa Clara University and Ahmedabad University.

ENV210 - Energy and Climate Change Credits: 3

This is a Core Course for the Minor in Environment and Sustainability and is offered as a specialisation/elective course for the MA in Economics programme. While the course contents would remain the same, different evaluation components would apply to MA students. Secondly, some of the sessions would be covered differently for the MA students and involve more readings for a particular topic. This course is intended to understand the various aspects of energy production, energy consumption and use and its relation to climate change. The course will explain what is meant by climate change, global warming, and sustainable development. The course intends to discuss some of the policy prescriptions for growth and energy use for India and other developing and developed economies as recommended by national and international bodies. This intersects with studying the energy balance of countries and its exports and imports. We also learn the aspect of providing affordable and clean energy access as part of rural electrification measures in India and the developing world. Finally, non-renewable and

renewable resource management and topics in energy efficiency are covered.

ENV501 - Environment and Sustainability Credits: 1

The course answers the following questions: How do issues of environment and sustainability impact firms? How do firms and their activities impact sustainability? The course covers three themes drawing high attention from the governments as well as other stakeholders including civil society and businesses. Conventionally the three themes; energy, environment and sustainability; are perceived through the lens of trade-offs. This perspective is changing in recent times. Policymakers, professionals and civil society actors are cooperating to align strategies and actions across themes to overcome societal and individual risks and to gain co-benefits and comparative advantage. In many environmentally proactive entities, "sustainability" is a core issue that is increasingly integrated with organizational processes, systems and strategies. Delineation of policies to align energy, environment and sustainability is a highly explored subject drawing interest from researchers and practitioners. The course is divided into four modules which combine distinct yet inter-related concepts around the three central themes. The sessions cover the landscape ranging from global, national to local, spanning technologies, management and concepts from social sciences and ecology.

ENV502 - Sustainable Development Goals Credits: 3

This is an interdisciplinary course focusing broadly on the seventeen dimensions of the UN Sustainable Development Goals (SDGs). Each session will focus on a thematic area and discuss the drivers of change, solutions and enabling factors using global case studies. The course will give the student broad knowledge of core concepts and take a deeper dive into the goals and indicators related to global societal challenges; climate change and energy transition; land and water resources and biodiversity protection. Students will gain an understanding of the processes of sustainable development through interdisciplinary engagement with concrete problems. Solutions at the country level, by the private sector and community and individual action will be covered

ENV591 - Sustainability and Circular Economy Credits: 1.5

The course discusses the core concepts of sustainability. Beginning from the scientific definition of sustainability, the course gives exposure to substitution possibilities in human consumption behaviour and production decisions of firms towards more sustainable choices. The course also studies country level data to see if higher per capita incomes are associated with sustainable choices and better waste management. The course dives into what is a circular economy and how it is related to waste management. From generating energy from waste, incineration to recycling and less dependence on virgin materials, the course studies rules and regulations set by the government with regards to waste management and circular economy. Having taken any principles level economics course would be advantageous for taking this course. Basic understanding of concepts such as consumer behaviour, production decisions of firms and how are they related to the aggregate economy would be needed for this course. For any student at the

level of MA in Economics or MBA, this course would be useful in that issues of behavioural economics and energy conservation, how the Environmental Kuznets Curve (EKC) varies with waste generation and recovery and per capita incomes, business opportunities out of waste recovery from landfills and recycling waste would be covered. These topics are essential towards sustainable choices, sustainability and building a circular economy.

ENV701 - Energy and Environment Policy Credits: 3

The dynamic changes in global and national economic systems, increasing demands and institutional structures and the goal to limit global temperature rise below 1.5 C has pushed 'energy policy' to the forefront for research and policymaking. Energy and environment policy is now emerging as a prominent research area. This is evident from the numerous theoretical contributions by individuals and multidisciplinary groups, addition of new journals, inception of new departments and centres at universities and research institutions. Since the failure of COP25 negotiations on Article 6 and other global developments have signalled an urgency to enhance national and subnational ambitions and actions. Developing countries are simultaneously balancing development needs such as equity, urban and rural development and infrastructure and services for all. Addressing these requires a transformative approaches beyond supply systems and energy efficiency and calls for innovations in new sources, systems, integration and demand. The course spans the energy policy landscape including supply systems, efficiency and innovation in light of the emerging socio-economic developments and trends, and the impact on and influence of human

behavior and well-being

FAC104 - Tally ERP 9.0 Credits: 2

Tally ERP 9.0 is an elementary level hands on practical training course which equips the students with necessary skills to operate a computerized accounting package. This course covers important features of financial accounting such as voucher entries of various accounting transactions to finalization of accounts, preparing Profit & Loss Account and Balance-sheet as per Schedule – VI, introduce to them basics of inventory management, Budgets and some of the widely used basic Taxation features such as TDS and recently introduced Goods and Service Tax.

FAC112 - Corporate Accounting Credits: 3

This course in Corporate Accounting, is an advanced level course which deals with complex accounting transactions for business operations. The focus of the course is the accounting procedures used to prepare two mandatory financial statements: Income Statement and Balance Sheet as per Companies Act 2013 and rationale behind preparation of Revenue Accounts of General Insurance Companies as per IRDA Act besides the financial statements. The course builds up a strong foundation for the other core accounting courses based on the pure accounting concepts. It is one of the pre requisites of Advanced Corporate Accounting courses as it includes the formats and Notes to Accounts as per schedule III of the companies. It also encompasses the practical aspects of statement of changes in Equity, consolidated and standalone statements. It encompasses the valuation of important components of companies' balance sheet;

goodwill and shares. This course introduces students to the corporate accounting and the external financial reporting environment. The focus throughout the course is on the preparation of financial statements for public listed & Insurance companies and valuation of important items like Investments, Goodwill and shares.

FAC114 - Financial Accounting Credits: 3

This course is an introduction to the basic concepts and standards underlying the financial accounting systems. It aims to build upon the important accounting concepts and principles including revenue recognition, inventory, depreciation, and understanding the accounting equation. The course focuses initially on how to record economic events in the accounting records (i.e., bookkeeping and accrual accounting) and how to prepare and interpret the primary financial statements that summarize a firm's economic transactions (i.e., the balance sheet, the income statement, and the statement of cash flows). The course adopts a decision-maker perspective of accounting by emphasizing the relation between accounting data and the underlying economic events that generated them thereby enabling the students to read, understand and analyse financial statements through ratio analysis. The course also explores the areas of financial shenanigans wherein the students will be able to learn how companies use financial statements to disguise economic reality.

FAC121 - Direct Taxes Credits: 3

Direct taxes have gained significant importance in the Indian economy as it constitutes a major source of revenue to the Government. The course aims to provide an understanding on the Taxation System in India in general and Direct Taxes in specific. The course is designed to help the students acquaint themselves with the basic knowledge and practical application of the principles and provisions Income-tax Act, 1961. It introduces fundamental concepts under the Act like Previous Year, Assessment Year, Income, Person, Assessee and Residential Status. It includes understanding the Basis of Charge under various Heads of Income-Salary, House property, Capital Gains and Income From Other Sources under the Act and Computation of Total Income of an individual under the provisions of the Act. The course is largely designed to develop a foundation for the students about the importance of studying Income Tax by developing their awareness about the personal income tax aspects of an individual.

FAC124 - Fundamentals of GST Credits: 1.5

GST is one of the biggest policy reforms in postindependent India. It is set to change the method of doing business in India. The GST is set to redefine the political, economic, and commercial policies of India. The course aims to give the insight of GST to the students. The course provides an eliminatory understanding of the law and how it is going to affect the lives of the common man. It also discusses how GST leads to the formalization of Business in India. GST also has an important role in curbing parallel economy in our country. A special focus is made on the impact of GST on SME Sectors, who constitute the backbone of our economy. The impact of GST plays a very important role in decision making. The production, marketing, and financial decision-making process has changed considerably post GST. The Course attempts to

brief students about the various aspects of GST which has to be considered during decision making. The course will also highlight how GST has played a role in reducing red-tapism and corruption in India. It highlights the benefit of GST for improving the ease of doing business in India.

FAC125 - Business Taxation Credits: 1.5

This course is an extension of the course FAC121 Direct Taxes. Having studied the fundamental concepts under Direct Taxes, including the taxation of an individual earning incomes from employment, owning properties, sale of capital assets and other sources, this course aims to focus on the income of an individual from Business or Profession. It specifically includes the understanding of tax laws relating to determination of business or professional income of an individual and the deductions and disallowances applicable in determining the taxable business income of an individual. The course also aims to create an awareness of the tax benefits provided under the Income Tax Act through the deductions available to an individual based on various investments and payments made through the incomes earned, as well as through the application of the principles and rules of set off and carry forward of losses occurred under various heads of income. Another interesting aspect of this course would be to explore the situations under which the income of other persons is included in the total income of an individual commonly known as the 'Clubbing Provisions' of the Act. Lastly, the course also aims at understanding the income structure of an individual involving various sources of income and computing his total income liable for tax under the Act.

FAC133 - Financial Management Credits: 3

This is an introductory course in finance. It provides an overview of some of the basic principles and theoretical framework leading to sound financial management decisions. The course provides an introduction to the application of finance in one's life and also the financial manager's role in achieving the optimal financial position of the firm. The course aims to provide students with a basic understanding of some of the tools and techniques used in financial decision making. It introduces the students to the utility of finance, it's importance and relationships with other fields. It introduces the key concepts of Time Value Of Money and then goes on to illustrate the application of those concepts to various decisions of savings, investment, determining growth rates, determining present and future values, etc., which help to take more efficient savings and investment decisions. The course introduces students to the various techniques of Capital Budgeting for enabling sound decision-making for undertaking longgestation capital projects. The course introduces the students to the various sources of long-term capital used for financing the firm and attempts to sensitize the students to the strategic and cost considerations to be considered while planning to raise funds from a particular source. The course also introduces the concepts of cost of capital, both for specific sources like bonds, preference shares, equity, retained earnings and the overall cost of capital. The course introduces the students to the concepts of working capital and how to estimate needs of working capital.

FAC215 - Cost & Management Accounting Credits: 3

The course aims to acquaint the students with the basic ideas about various cost accounting concepts & techniques and emphasize the need for management accounting in the decision-making process. The course will make the student familiar with the cost ascertainment and difficulties associated with the calculation of cost. This course consists of various cost terms and concepts; elements of cost, and the preparation of a cost sheet. The course also focuses on the concepts and implications of cost-volume-profit and break-even analysis & types of variances with their implications in standard costing. It also aims at equipping the student to apply accounting and costing techniques in preparing various types of budgets like production budgets, cash budgets, flexible budgets, and making short term decisions.

FAC223 - Tax Procedure Credits: 3

The course provide to impart procedural aspects of Income Tax Act, 1961. It discusses various types of returns to be filed. It also discusses provisions of TDS and Advance tax. It discusses various appeal mechanisms to resolve tax disputes.

FAC225 - Fundamentals of Corporate Governance Credits: 3

Corporate governance has gained significant importance following numerous corporate frauds in India and across the globe, including Satyam, Enron, and WorldCom, among others. This course aims to provide an in-depth understanding of the principles and procedures of corporate governance. It will expose students to the governance role of various stakeholders, such as the board of directors, auditors, managers, promoters, and institutional investors and different processes employed to promote effective corporate governance. It will also discuss the legal and regulatory framework for corporate governance in emerging economies, particularly India and highlight its managerial and policy implications.

FAC241 - Banking Credits: 3

Banking is considered as the lifeline of any modern economy. It is the core financial service, and plays a vital role in the success / failure of an economy. A large number of changes have happened globally as well as in Indian economy that have forced banks to change the ways they do their business. Since the course participants do not have any formal background of financial services and especially banking, the course aims to provide them with a learning opportunity to build foundation level understanding of the financial system and specifically the banking sector.

FAC244 - Financial Markets Credits: 3

This is a specialisation course which builds upon the financial knowledge that students obtained in earlier courses on Financial Management. It aims to provide the students an introduction to various financial markets like: capital, money and foreign exchange, which the student may be required to access as an individual or as part of an organisation. It introduces the students to the utility of these markets, the products available in these markets for investing and the role of the various market participants.

FAC311 - Analysing Corporate Annual Report

Credits: 3

An annual report is a powerful and revealing document about a company's financial standing. To a trained professional it gives a substantial insight into where a company may be headed in the future. However, to an untrained eye the annual report may seem like walls of accounting technicalities provided to fill space between the glossy photos and the upbeat messages from the CEO. In many aspects, reading an annual report could be a daunting task as it is a mixture of factual financial results and public relation information. There is a wide communication gap between the world of compliance and disclosure. It is difficult to interpret and understand the information provided in slick expensively produced annual reports. There can be no better piece of information about a company than annual reports but it is essential to cut through the marketing clutter in annual reports and extract vital information (financial content) that shows true picture of the company. This enable course will take the students through an intellectual tour of an annual report of the companies. It is designed and meant to develop skills to translate and read between the lines of the published financial statements and Notes to Accounts. It enhances the skill to sense the bigger picture behind the reporting of a company. The part of the course covers tools of financial analysis, including methods of evaluating accounting quality and corporate performance. The course shall address multiple issues pertaining to components of the Annual report like Management Discussion and Analysis (MDA), Directors Report (DR), Financial Highlights and Corporate Governance of the Companies. Through real world examples of listed/unlisted companies and projects, the course focuses on reading the annual reports with the thorough understanding of all the components

essential for understanding the working of the company, its peers, economic environment, marketing aspects, growth trajectory, vision and analysis of the management, Auditors' Remarks and the human resource and ethics as a part of corporate Governance. Students will learn to make better use of annual reports focusing on key issues, raising pertinent questions, and enhancing their understanding of the overall profile of the companies they are assessing.

FAC331 - Corporate Finance Credits: 3

This course introduces students to the basic concepts and methods that financial managers use to make effective investing and financing decisions, and explore the ways in which value is created and measured. The course lays emphasis on specific finance concepts vis-e-vie the risk and return relation, capital budgeting decisionanalysis tools, dividend policy, and an overview of Leasing.

FAC336 - Working Capital Strategy Credits: 1.5

Working capital is a critical factor in the sustainability of a business. At the same time, financing it can be very costly. Therefore, a proper working capital strategy and management are essential. Working capital management entails short-term financial decisions involving the firm's liquidity and default risk while maximizing shareholders' wealth. It ensures that a firm can finance its operations and pay the maturing debt obligations to avoid insolvency anxieties.

FAC512 - Financial Accounting Credits: 1.5

Financial accounting is the language of business. It is the means by which an enterprise's financial situation is reported and communicated. The course focuses on the integration of accounting framework and business analysis in the forecasts of financial statements, which means applying accounting framework in analyzing business activities and the predictions of full sets of financial statements. The course deals with understanding the framework of the Financial Statements of the Companies and its Analysis. The course will enhance students' knowledge from recording entries to actual reporting. The course focuses on the fact that how key business transactions are accounted for, and how these transactions appear in the financial statements. The course will help the students to better understand the meaning of financial statement information and how to use financial statement data for analysis. The course forges a unique path in financial statement analysis through Commonsize statement Analysis and ratio analysis technique. The students shall understand the real life reporting of manufacturing and service companies through a project on Annual report of Nifty fifty companies

FAC513 - Management Accounting Credits: 1.5

This course covers the strategic nature of management accounting and the relevance of accounting information for today's competitive business environment. Emphasis is placed on the provision of accounting information for planning, control and decision making, and the application of accounting information for supporting tactical objectives and strategic missions of organizations. The first part of the course focuses on fundamental cost concepts, understanding cost measurement and cost allocation for product manufacturing and service organizations including techniques of activity based costing. The second part emphasizes on developing the foundation for managerial decision making by exploring concepts of cost-volume-profit analysis, relevant cost analysis and its impact on the functioning of an organization. The third part of the course brings in aspects of strategic planning and operations control by focusing on the relevance of budgeting, variance analysis and strategic profitability analysis. Finally, the course aims to link theories to practice in management accounting by providing students with real life scenarios to integrate knowledge and promote skills in critical thinking and decision making.

FAC541 - Financial Markets and Institutions Credits: 3

Financial markets and financial institutions facilitate the flow of funds from suppliers of funds to the demander of the funds. The course provides a conceptual framework that can be used to understand why markets exist. The focus here is on money market and the capital market in terms of the securities traded and intermediaries involved. Financial services constitute an important segment of the financial system. The developments in the realm of financial services sector of an economy have a profound effect on its banking and financial system. Indeed, presence of a strong financial services sector is considered an economy.

FAC633 - Security Analysis and Portfolio Management Credits: 3

This course offers an introduction to the study of investments in a portfolio context. In doing so, it

exposes students to the breadth of investment alternatives and portfolio construction to meet investment objectives. certain Different individuals or institutions will have differing investment objectives. The course will start with a discussion of the ways in which objectives vary, and the resulting portfolio implications. After a brief review of the various markets and their structures we will turn to one of the cornerstones. of modern finance - "Modern Portfolio Theory". This is an emphasis on the importance of constructing optimal portfolios, in which diversification is used to achieve a target objective. It holds that capital should be allocated among the major asset groups in order to arrive at a balance of risk and return that matches the circumstances and objectives of the investor. Only after this allocation does individual security selection come into play. We will then go to a review of asset pricing theory, with a brief stop at equity valuation, and bond mathematics. In doing so, students would be exposed to different methods of valuation namely DCF, Relative Valuation and Economic Value Added in the context of deriving the intrinsic value of a share. This is followed by an overview of equity and bond portfolio management strategies and a review of prevailing portfolio performance measures. The course concludes with the question of performance evaluation - how do we measure success as compared to the original objectives? While a predominant proportion of the course contents fall within the contours of "Efficient Market Hypothesis (EMH)", the course also acclimatizes students on the trajectory of discourse on market efficiency - EMH to Behavioral Finance to Adaptive Market Hypothesis (AMH).

FAC635 - Financial Modelling Credits: 3

Financial modelling forms a part of the essential skill-set required by modern finance and business professionals to succeed in their careers. Most financial decisions, ranging from simple DCF calculations to financial analysis for mergers and acquisitions, require managers to quickly and accurately process large financial data for decision making. Today's financial models have gone far beyond the single-sheet spreadsheets and involve the use of advanced decision making and analysis tools. Proficiency in building financial models would place a powerful skill in the hands of students to effectively compete and succeed in the financial world.

HRT504 – Workshop Credits: 1.5

This is a project-based course in which students will bring together learning from different courses so far into a project that they will pursue - either as individual or in groups, to come up with a heritage management proposal. This will also connect to their preparations for upcoming summer practicum.

HRT511 - Heritage Discourses and Frameworks Credits: 3

Heritage is a broad concept that draws from various disciplinary discourses including anthropology, architecture, art. culture. development, ecology, environment, forestry, geography, history, natural resources, traditional arts and crafts, urban design and planning, wildlife and so on. However, a general perception of heritage usually refers only to the historic and monumental examples of heritage. Even within the monument-centric discourse, it is widely

perceived that the objective of heritage conservation and management is to 'preserve' heritage as it is (the cult of the ruins) by using conservation and preservation as a technical process of ensuring the longevity of the ruins. However, it is widely accepted and followed today that the heritage discourse has evolved much broadly to account for change and continuity, the intangibles and more recently calls have been made to view heritage holistically. As opposed to the conservation / preservation paradigm, an interdisciplinary management paradigm is evolving through discourses as well as frameworks of practice at different levels. This course provides an overview of both the conventional notions and the evolving concepts. Hence, it gives a critical foundation to heritage understanding and makes students aware of a range of global frameworks that have been influencing current heritage practices. This will be a foundational course to begin both for Masters as well as Doctoral students in heritage management.

HRT512 - Conservation Principles and Processes Credits: 1.5

This course will introduce key concepts and processes of conservation science. This will be expanding on to the heritage discourses but focusing mostly on the material science aspects within heritage management.

HRT531 - Cultural Resource Mapping & Documentation Credits: 3

This course provides an overview and approaches of documentation of various heritage resources, preparing inventories and archiving – starting

from architectural and objects documentation to intangible cultural heritage resources documentation, and subsequently moves towards a systematic inventories and database of heritage elements and assets.

HRT533 - Heritage and Business: Designing Heritage Experiences Credits: 1.5

In an attempt to acquire a competitive advantage and maximise profit, companies seek ways to enhance customer loyalty. The most powerful tool to this end is the model of designing experiences. 'Experience', differentiated from 'service', is a personal, particularly strong connection, based on emotions and imprinted in memory that the company develops with its customers. It is important to note that the model has proved successful even at periods of instability/crisis. The course presents the principles, methodologies and practical tools of the experience model, and applies it to a wide range of heritage organisations and sectors (such as cultural tourism, fashion/design/ traditional crafts, cultural events, educational programs and digital technology applications) with respect to heritage significance and values. In this context, the key challenges for heritage organisations are to incorporate the experience model in their: • strategy: customer experiences at the core of the business model, and not as an incidental byproduct • management: setting in place and linking management levels, people, and processes for the designing and offering of experiences • branding and marketing: creating a strong brand centred on customer experience; and communicating the offering of experiences to the customers, through various advertising channels. A wide range of heritage organisations, international and Asian and Indian ones, are used

as case studies. The ultimate aim of the course is to help current and potential managers design unique customised experiences, sustaining and expanding their organisations' customer base and increasing customer loyalty. The course is open to students of diverse backgrounds and interests. The course is offered to both postgraduate and undergraduate students.

HRT634 - Arts, Culture and Heritage - A Managerial Economics Perspective Credits: 3

Arts, Culture and Heritage have been approached from historical, legal, aesthetic and institutional perspectives. Exposure to these dimensions form the foundations of education in arts, culture and heritage and have the potential to create a corpus of scholarship and research prowess in the three realms. It is important that professional managers and policy makers are sensitive to the trends imposed by the new generation of digital technologies and economic instruments remains to be accomplished. However, the prevalent economics perspectives often miss out the untapped potential of arts, culture and heritage sectors. It is against the background of this felt need that this course has been conceived. The goal of this Course is to explore applicable economics frameworks and provide insights on the management dimensions of arts, culture and heritage for graduate and Doctoral students who desire to specialise in arts, culture and heritage.

INS511 - Perspective on Market Research Sector

Credits: 1

This elective course on the market research industry is intended to provide the participants an overview of this industry: its size, structure, growth, key players, segmentation, trends, challenges, and opportunities. The market research industry delivers forward-looking information and insights to help companies take effective marketing strategy decisions. Market research impacts all aspects of a client's business, across all industry sectors. Hence, an understanding of the market research industry will prepare future users and participants of the industry understand what drives this industry, what the constraints are, how the industry is evolving and how to maximise value when selling or using market research.

INS512 - Perspective on Real Estate Sector Credits: 1

Real estate sector is one of the largest industries in India in particular and the most globally recognized sectors in general. It is one of the biggest employers in the country. This sector includes housing, retail, hospitality and commercial. In terms of the market size in India, the industry is expected to grow from US\$ 120 billion in 2017 to US\$ 1 trillion by 2030. Moreover, the growing FDI in the sector and rapid urbanization will contribute significantly to the growth and expansion of the real estate industry. Hence, an understanding of this industry is required for management students to explore the job opportunity in this sector. This course is designed to be a primer on the real estate sector in India. This course attempts to provide a glimpse of some relevant areas that need further attention both from the industry and the academic perspective.

INS514 - Perspective on Banking Credits: 1

Banking sector is the lifeline of any modern economy. It is one of the important financial pillars of the financial system, which plays a vital role in the success / failure of an economy. The banking sector is dominant in India as it accounts for more than 60 per cent of the assets of the financial sector. Banking had traditionally remained a protected industry in India. A series of reforms were undertaken based on the recommendations of the Narsimham Committee post 1991. A variety of developments have compelled banks to change the ways of doing business. This course attempts to provide a glimpse of some relevant areas that need further attention both from the industry and the academic perspective.

MAT142 - Introductory Calculus Credits: 3

This course is one of the core requirements for the Bachelor's programmes in Economics and Business. Students of Bachelor's programmes of other disciplines may take it to fulfill the GER. Calculus is an important mathematical discipline that deals with change and motion. It is extremely useful not only in physics, and engineering, but also in many other diverse areas including, biological sciences, business and economics. This course is a comprehensive introduction to the elementary concepts of calculus namely, Limits, Derivatives and Integrals with some of their applications, including related rates, linearization and differentials, optimization and numerical algorithms like newtons method. The applications are drawn from many fields and include related rates, linearization and differentials, optimization and numerical algorithms like newton's method. The course is aimed at first-year undergraduate students of any field. A familiarity with highschool mathematics upto 12th grade is assumed. The student entering this course must pass a placement test. The test checks the students'

familiarity with topics in precalculus mathematics (non-Calculus prerequisite topics covered in school mathematics up to 12th standard mathematics for eg. trigonometry, coordinate geometry and elementary conic sections etc). If the student does not pass this test the student will not be allowed to enroll in MAT 142.

MGT105 - History of Indian Business Credits: 3

An orientation and curiosity of studying Indian and global business history Business history has an important role to play in developing and clarifying our understanding of the evolution of business - be it industries, individual companies, business families and groups amidst the social and economic environment in which it sustains. While quantitative methodologies and the need for big data drive research in Management studies, this course demonstrates how far business history is a truly global field, even while studying it from a national framework. To draw in-depth, finegrained comparisons across different regions of the country, examining strategies of firms, states, and business associations, students stand to gain new perspectives into their own businesses while participating in current debates in adjacent fields such as political economy and global businesses. This course on the history of Indian Business is multidisciplinary in its nature, where history and business are conjointly examined as important tools for understanding human nature and its past endeavors, throwing light on the present and future in many ways for the young managers/entrepreneurs. By following a project based learning pedagogy, this course attempts at enabling students to understand history as contemporary, everyday lived experience.

MGT111 - Identity and Behaviour

Credits: 3

This course begins with a discussion on how individual and group identities are created and maintained and in turn how it affects behavior. Several classical and neo-classical theories from the disciplines of psychology and social psychology would be discussed. The understanding of these concepts and theories would facilitate the understanding of groups and organisations in future courses. It would equip the students to develop people skills and enable them to deal with issues such as improving productivity, job satisfaction, motivation, learning etc. in organisations. The course would promote self-awareness and interpersonal awareness and students' ability to work in groups and in organizational settings. The course would focus on concepts which facilitate the understanding of the 'Self' and 'Identity' followed by its implication on human behaviour.

MGT112 - Organisation Processes Credits: 3

This course is a spin-off to the Identity and Behaviour course taught in previous semesters. People working in organizations get affected not just by who they are, but also but who they are working with and aspects like their teams, leaders, organizational culture, change and communication. The course shifts away from the individual level to the group, and organizational levels of behavior drawing on concepts and practices from the field of Organizational Behavior (OB). This course provides a basic understanding of your own and others' behavior, particularly in teams. It enhances your ability to communicate and work effectively with others. Organization requires effective management of people and a clear understanding of human

behavior and social processes. Managers need to have a good understanding both of themselves and of those whom they will lead. The prior knowledge of individuals' perceptions, attitudes, and behavior will enable you to choose appropriate leadership styles and managerial practices to increase organization effectiveness and positive human outcomes.

MGT121 - Human Capital Management Credits: 3

Success in today's competitive business environment is increasingly the function of effective management of its resources, particularly, employee. The quality of the organization's employees, their enthusiasm and satisfaction with their jobs, and their sense of fair treatment all impact the firm's productivity, level of customer service, reputation, and survival. The students of human resources management must aware of basic aspects of human resource management to understand the functioning of human resource management in an organizational setting. The challenges that might be associated with and the objectives of Human capital which they have to deal with when going through the new nature of organizational structures.

MGT136 - Indian Legal System Credits: 1.5

Day-to-day living and Business operations have to be carried out within the legal framework of a country. This premise requires a student to attain working knowledge about the legal systems and some laws which impact the everyday life. The course aims at meeting this requirement. The course begins with introduction to the Indian Legal System, proceeds to discuss the important Rights of every Indian and finally explains selected commercial laws. The topics discussed throughout the course aim to ensure personal and professional well being of the students from the legal context. Students should expect to deal with quite a few court cases over the semester and in some cases present them in writing.

MGT161 - Business Ethics Credits: 3

Modern businesses are not evaluated only on the basis of returns they generate for their investors, but also through the impact the business makes on its stakeholders. This course is designed with the understanding that an ethical business increases its endurance and there by creates long term returns for its stakeholders. On one hand the course aims to understand the evolutionary theories of Ethics on the other it raises the ethical issues faced in day-to-day management. The purpose of the course is to equip the learner to face the ethical dilemma in everyday managerial situations and overcome them with fair and just techniques. Thus the course discusses practices and processes through which management students can build a business for the long run. In order to achieve this objective, the course is delivered with greater emphasis on cases and hands-on activities. The sole objective of business cannot be that of earning profit. What a business earns is important but it is equally important to know how the business earns it. In the wake of recent business scams there is a burgeoning need for ethical behavior by entrepreneurs and managers. So what is the ethical behavior and how can it be achieved while dealing in businesses? The course begins with discussing the origin and development of business ethics thereby introducing the subject. The course then takes the discussion to examine the relationship of ethics and governance, more importantly corporate

governance. In the second half, the course discusses various managerial areas of business, wherein ethical dilemma may arise thereby forcing a decision maker to make difficult choices.

MGT221 - Strategic Human Resource Management Credits: 3

Given globalization, the growing integration of the world economy in to one marketplace, corporations are subject to unprecedented levels of competition. The critical source of competitive advantage for these corporations is not their physical assets, but their people. It is people, not companies, who innovate, create new products, make decisions, develop and implement business plans, penetrate new markets, and serve clients and customers. While developing effective business strategy is important to organizational success, the capacity to implement any given business strategy is completely dependent on a corporation's people. The Strategic Human Resource Management module provides students with a critical understanding of the theories, principles, historical trends, current issues and practices relevant to human resource management strategy in organisations. This will support the development of subject specific and key transferable skills necessary for employment in roles which require the effective management of both human and knowledge capital within the organisation, therefore extending beyond purely human resource management roles. By exploring the shifting of roles from process manager or administrator to strategic business advisor and partner, students will understand the unique strategic positioning of contemporary human resource management and the subsequent demands placed on resources working in this area

MGT223 - Industrial Relations and Employment Laws Credits: 3

Given globalization, the growing integration of the world economy in to one marketplace, corporations are subject to unprecedented levels competition. The critical source of of competitive advantage for these corporations is not their physical assets, but their people. It is people, not companies, who innovate, create new products, make decisions. develop and implement business plans, penetrate new markets, and serve clients and customers. Workplace issues have become one of the fastestgrowing areas of state and federal law. Employment-related lawsuits filed in courts have tripled in volume in the past decade, and now account for a tenth of all civil cases. Many state courts have experienced a similar burgeoning of their employment law caseloads. This course examines this diverse, rewarding, and rapidly evolving area of legal side of employment by considering the diverse array of laws and institutions that regulate the employment relationship. The substantive focus of the course is on laws that affect employees in unionized and non-unionized settings, such as protections against dismissal without cause, wage and hour restrictions, workplace privacy, covenants not to compete, and mandatory arbitration of employment disputes and how it stand up in global scenario as well.

MGT234 - Civil & Property Laws Credits: 3

The basic understanding of Civil Litigation and its nuances is required for any citizen and professional who intend to carry out trade and
business. Different property laws are applied to tangible and intangible properties and the first phase of this course deals with Intellectual Property Laws, Transfer of Property Laws and laws on Real Estate. How to execute the contracts, what can be the remedies available while executing these laws, and amicable resolution of the civil disputes is dealt in the second part of the course. The course is divided into two modules namely Property Laws and Civil Procedural Laws.

MGT239 - Legal and Ethical Aspects of Digital Technologies Credits: 1.5

The exponential growth in digital technologies and their widespread acceptance has elevated several Ethical and legal challenges which need careful deliberation. While these technologies promote innovation intending to improve ease of living, they create serious issues on privacy. governance and societal impact. Ethicists have raised concerns over how digital technologies violate the core values of human existence and sought active measures to protect them. Regulating agencies have been looking for ways to regulate these new technologies to protect core human values. The regulatory framework, however, has lagged considerably in regulating technological advancements resulting in a wide gap between the technology and regulatory upgrades. Consequently, there is a growing emphasis on self-regulation by the industry and voluntary codes that bridge the current gap. This course looks at the Ethical and legal challenges posed by digital technologies, understands the existing regulatory framework and examines how self-regulation and soft law can help overcome the challenges. The course starts with an understanding of how digital technologies have

raised ethical and legal concerns and why these concerns require immediate attention, particularly when the regulatory frameworks have not been able to keep up with the emergence of technology. In the next stage, the course looks at the existing regulatory framework for these digital technologies and how to strengthen these frameworks. The course concludes with an overview of recent regulatory developments in this direction, including the idea of self-regulation by industry and the emergence of Soft Law.

MGT328 - People Analytics Credits: 3

MGT341 - Competitive Strategy Credits: 1.5

Organizations from inception are driven by organizational level objectives also known as strategic goals of the organization. Strategies are designed to achieve these strategic goals and this planning is a prerogative only of the top-level managers. They have the knowledge of the business environment, both internal and external and are able to connect the activities of the various functions of the business to achieve organizational goals. This course aims to create an understanding of how organizational level goals are decided and how competitive strategies are formulated after conducting situational analysis.

MGT504 - Behavioural Lab I Credits: 0.75

The area of behaviour is no more restricted solely to experimentation and to decode behaviour for work output. In these contemporary times, managers are challenging the accepted results of a traditional understanding of behaviours. The idea of how behaviour contributes at business, society,

and technology levels is changing. The idea of behaviour lab is to deliver behaviour to look at businesses, areas, and domains affected by it. Addictive behaviour, Networks, Irrational decisions, Mapping behaviour online are the newer areas where behaviour's application has become more relevant. This also means developing skills to understand, analyse and apply behaviour in other areas that are not just restricted to Businesses. Thus, learning behaviour with a more interdisciplinary focus and having skills to understand and analyse them. Consequently, such skills facilitate a person to survive what waits for them in the professional world. Workplace challenges, often fuelled by a keen intuition, can now form the basis of experiments that allow us to understand the processes, decisions, communities and how they work in tandem to achieve or/ and survive changes. Behaviour Lab equips students with tools, methods and interventions aligned with these changes and also help them later in their journey in the business world. Moreover, the course makes them aware of how the behaviour domain is contributing in areas that were untouched earlier.

MGT505 - Problem Solving for Social Change Credits: 1.5

Ahmedabad University engages students' imagination with contemporary global problems through Project-based learning. The graduates of the management school are supposed to be socially conscious leaders with a problem-solving attitude. These graduates will play a crucial role in solving social problems through various institutions such as businesses, government and non-profits. Problem-solving for Social Change teaches skills, theories and strategies necessary for engaging management students with various social problems. The course will cover such issues as Problem-Solving Philanthropy and roles of non-profit organisations in solving social problems, outcome-oriented philanthropy, CEO-Activism. The course will also encourage students to discover whether giving to the poor is morally essential or optional. Students will work in groups to apply these concepts and tools to analyse their choice and interest problems.

MGT506 - Digital Thinking Credits: 1.5

The pace at which digital technology is changing the world is phenomenal. The removal of constraint has created opportunities for organisations and businesses that can change lives and enterprises. Social media allows you to reach vour customers and listen to them from wherever you are, mobile computing allows you and your employees to be productive from anywhere anytime. Big Data and Artificial Intelligence has led to new knowledge creation and augmentation of capabilities. Consumers and the market are fast becoming ready and welcoming to this dynamism and reality. Companies and enterprises are also realising the change. This course introduces the most recent advances and developments in digital technology that are changing the way departments, functions, and organisations work. The course aims to prepare individuals to be ready for a work environment that is digitally dynamic, technologically evolving, and most importantly changing constantly.

MGT509 - Business Models Credits: 1.5

'Business-model' is a buzz word now in boardrooms, especially when the business encounters problems. The managers agree or disagree if the present business model is working

any more or it needs navigation. To put it simply, a business model is both a short- and long-term framework of plans and moral rules within which a business operates. If the business model is strong it creates value and business prospers. Reverse happens when the business model is week. Over a period of time, an existing business calibrates its business model in keeping with the surrounding changes to remain relevant otherwise it may perish. A carefully designed business model has an inherent strength but it may not be long lasting. Hence, calibration is necessary from time to time. A rightly calibrated business model can act as a game changer. Today's business models were imagined a decade ago and we have to create tomorrow's business model considering many unknown bets. Therefore, formal education and intelligent hard work are necessary to create a winning business model. Even though there are some generic and popular business models developed by experts, the owners and managers can bypass the standard ones and create a differentiated business model most suited to their businesses. This course mainly deals with identifying and placing various business drivers in sequence and changing it whenever and wherever necessary in order to make competitive business models.

MGT511 - Organisational Behaviour Credits: 1.5

Organisations are a combination of interactions, relationship and processes that are played out in various scenarios to make the organisation function efficiently. These interactions are not simple in nature and may lead to varied outcomes. Consequently, making an organization a system that is constantly evolving in terms of people, behaviour and its reaction to the systems. In the contemporary world, variables of data,

technology, automation, shared economy, behaviour, people and interactions are the reason for any organisation to sustain and leap. Owing to ambidexterity in organisations and people, we see a drastic shift that organisations are going to work. The pandemic has acted as a catalyst for numerous changes in organisations. Thus, making it more critical and intricate to understand the interaction among people, behaviour and the organisations in which we work. The course will be an introduction to concepts that are going to be a part of students/ Managers organisational life. The students shall be able to test their understanding of the concepts that we introduce by examining Organisational life cycle and its various components. This will involve understanding, reflecting and looking at processes that are part of the organisational life of individuals, members of a team or organisations. We shall focus on the following:• What is organisation for an individual?• Based on my life and experiences, how do I look at the idea of organisation. As a manger/ Employee/ or entrepreneurs what will be my role in an organisation. The course is designed to introduce students to the ideas of Managing people in organisations. While going through the course, they will be able to understand, reflect, debate around the life of and life in organisations during the changing times. Each topic will be acting as the building blocks of organisations and life within them.

MGT513 - Leadership Credits: 3

This course deals with Leadership. In the present context the idea of Leadership is changing. A leader is no longer a person with authority who can guide a group of people to a defined goal. The course will highlight the understanding of leadership in the context of influence as suggested

by John Maxwell. A modern leader is authentic, leads by example, encourages, empowers, and nurtures people around her/him. S/he is empathetic towards needs of others, is humble and emotionally intelligent. This course aims to enable participants understand and develop leadership insights and competencies at self, group and organisational levels. At the theoretical level, the course aims to provide conceptual frameworks to understand various aspects of leadership at the said three levels. It would highlight the seminal works of John Maxwell, Kouzes and Posner, Richard Daft, Bill George, James Scouller, Ken Blanchard, Jim Collins and Robert Greenleaf among others. At the application level, the course aims to provide necessary knowledge and skills required to develop a Leadership repertoire in personal and professional contexts through reflections, experiential learning and classroom discussions. The course would help participants to gain insights into Authentic Leadership and how one can become an effective leader by knowing one's self and people around us. The course will help students to bring in changes at a personal level through reflections and introspection and will help them understand their own values, skills, goals, leadership purpose, leadership readiness etc.

MGT521 - People Practices and Decision Making Credits: 1.5

"There are only three measurements that tell you nearly everything you need to know about your organisation's overall performance: employee engagement, customer satisfaction, and cash flow... It goes without saying that no company, small or large, can win over the long run without the right talent which believes in the mission and understands how to achieve it." - Late Jack

Welch, former CEO and chairman of General Electric to win the customers and shareholders, it is essential to first win the people within the organisation. This course on People Practices and Decision Making is an introduction to various people practices in organisations. It will enable participants to understand how these practices should be designed and implemented to provide a competitive advantage to the organization through its people. Further, the course aims to develop decision-making skills keeping in mind that both the organisation and its people grow together. The course introduces various practices and frameworks in talent acquisition, learning, and development, employee relations, health, and safety, etc. The course places every participant in the shoes of a manager who makes decisions for their people with a motive to drive the organisation forward towards its mission. Each session integrates the concept of "Diversity and Inclusion" since it is a prerequisite for peoplerelated practice and decisions.

MGT522 - Strategic Human Resource Management Credits: 3

Strategic Human Resource Management is the foundation of any organization which when well planned and executed aids the organization in creating a sustainable competitive advantage. This course examines the role of HRM in business viability and relative performance. It considers the potential of HRM to enhance organizational flexibility and help build human capital for overall organizational effectiveness. It examines HRM in dynamic and complex contexts and discusses practical ways of improving strategic HR planning in firms. The course begins with a recap HR concepts and theories discussed in the previous course MGT121 Human Capital Management. It will therefore highlight the HR practices in the light of various strategies taken at the organizational level, thereby bridging the gap between strategy and human resource management. It later moves on to encompass the various division of HR that are affected/change with the management's various decisions.

MGT524 - Dark Side of Organisation Credits: 1.5

Organisations were created to achieve targets by people working towards a single goal, but in reality it is tough to achieve. Human behavior leads to multiple negative outcomes at organizational units of individuals, teams and groups. The way people may behave in organisations may not be always beneficial. Dark side behaviors typically lead to negative outcomes. Those who engage in these negative behaviors generally are aware that their actions can cause harm to others, their employer, and/or to them; hence, the instigator usually has intent. It is essential for tomorrow's managers to understand what are these behaviors how sometimes they may lead to functional outcomes, sometimes it may lead to negative outcomes as well. It is essential that we understand these behaviors, as well as control, prevent, mitigate, or ameliorate their occurrences. I. Aim of the course is to understand what might be source of such behaviors in organizations and is it possible to mitigate such behaviors in organizational units.

MGT532 - Industrial Relations and Labour Laws Credits: 3

In an era of changing business scenarios, human resources have emerged as an inalienable part of the business. From merely being a medium of

economic activity, human resources have emerged as an intrinsic stakeholder in the business. In a world of increasing regulatory compliance requirements. efficient of employment codes is the minimum that organizations must achieve. Premier organizations strive to strategize their human resource policies and man-power requirements in a way that not only ensures smooth compliance of employment laws but generates greater benefits for an internal stakeholder. This course discusses in detail the Labour Codes applicable in India. It starts by examining the constitutional aspects of labour laws. The course then moves on to discussing the four labour codes prevailing in India. In the concluding part, the course discusses the regulatory framework in different countries and highlights the role of global organizations like the International Labour Organization.

MGT541 - Business Strategy Credits: 3

This course captures the various pillars of strategic decision making in any business. Firms have choices to make if they are to survive and prosper. Those which are strategic include: how to create value, the selection of goals, the choice of products and services to offer; the design and configuration of policies determining how the firm positions itself to compete in productmarkets (i.e., competitive strategy); the choice of an appropriate level of scope and diversity; the different options in terms of directions and methods of growth - including coopetition. The course also covers the role and impact of technology on modern-day businesses, viz. how technology impacts organizations and how techbased businesses strategize. Later, we will learn about opportunity identification with a Blue Ocean Strategy approach, before moving onto the

last module of the course which focuses on strategy implementation.

MGT543 - Corporate Strategy: Formulation & Implementation Credits: 1.5

This course focuses on one of the main questions in a business organization - how can you create and manage a corporate strategy for growth and achieve success? Top management of business organizations need to evaluate strategic choices of including growth directions product diversification and internationalization. Next, they also need to choose the appropriate method of pursuing the growth direction from amongst various methods of growth, viz. internal development, strategic alliances and mergers / acquisitions. This course encapsulates these strategic choices through several concepts and frameworks that are rooted in the theory of strategy and management, which have proved valuable in practice. The course ends with what managers often describe as their greatest challenge - implementing strategy and how a leader should attempt seamless corporate strategy implementation. The course will focus on the thinking, skills and actions required of manager for the development, communication and implementation of strategic organizational choices towards organizational success.

MGT546 - Pharmaceutical Industry and Healthcare Sector: Challenges and Opportunities Credits: 3

Covid-19 pandemic has underscored the importance of the healthcare and pharmaceutical sector and why a well-functioning healthcare sector is an essential prerequisite for India to emerge as a global superpower. Given the increasing importance of healthcare and pharmaceutical, it is vital to understand how the pharmaceutical industry works, the trade-offs involved, and why it has one of the highest R&D spendings and innovation rates? Why are healthcare sector costs so high, what are the linkages between physicians, pharmaceutical, and medical devices, and how can we manage these linkages? With increased funding for healthcare and the accelerated emergence of technologies ranging from mRNA to DNA-based vaccines, AIenabled healthcare, and personalised medicine, the innovation landscape is evolving rapidly, creating newer challenges and opportunities. These challenges require a holistic understanding of the pharmaceutical industry and healthcare sector to develop a broader understanding of trade-offs and develop logical and integrated solutions. The course aims to improve participants' ability to formulate and manage the healthcare sector and pharmaceutical industry challenges. This course will allow the participant to appreciate the inherent complexity in decisionmaking in healthcare and pharmaceutical, integrate the insights gained from economics, statistics, and introductory management courses, and apply them to specific industry contexts and learn the associated challenges. It is ideal for Post-Graduate Students and 3rd or 4th Year Undergraduate Students across Management, Economics or Entrepreneurship, and Family Business Disciplines. The course is divided into four modules: Module 1: Pharmaceutical Industry: Global Ramifications Sessions 2-7Module 2: The healthcare sector Sessions 8-12Module 3: Physician and its behavior Sessions 14-17Module 4: Different disease markets and their challenges Sessions 19-26

MGT621 - Selection and Testing

Credits: 1.5

It requires more than mere instincts to hire the right candidate. Yet most managers solely use their instincts while making hiring decision. Given that poor hiring can be extremely costly on the part of management, it is essential for managers to appreciate the intricacies involved in hiring. This course is targeted towards honing up essential managerial skills for taking right kind of recruitment and selection decision.

MGT623 - International HRM Credits: 1.5

This course aims to develop the professional skills of future managers in the areas of international human resource management and cross-cultural management. This course provides an opportunity to students to explore international dimensions of the core aspects of human resource management, such as linkage international business strategy and with structure, recruitment, compensation and reward training and development, management, and industrial performance management, relations.

MGT626 - Sustainable Human Resource Management Credits: 1.5

The course Sustainable HRM focuses on human resource functions in large companies in a globalized world from a sustainability perspective. The approach focuses on the role of HRM and leadership in contributing to corporate sustainability to achieve triple bottom-line or economic, social and environmental outcomes of sustainable development. This course is based on research and insights from diverse fields, including corporate sustainability and corporate social responsibility, strategic HRM, sustainable HRM, Green HRM, sustainable HRM measurements and reporting,

MGT628 - People analytics Credits: 3

Human resource management is the process of gaining a competitive advantage through people. Organizational performance is driven by people, and it depends on certain measures. Human Resource (HR) experts need to be skilled at planning and interpreting organizations' people metrics. This requires a solid understanding of HR analytics, i.e., the systematic collection, analysis, and interpretation of data considered to improve decisions about talent and moreover the organization at large. The application of analytics is changing the way HR managers quantify the value that people (i.e., talent) - a company's biggest asset - have on the organization's ability to succeed in the market or in its mission. For enabling managers to make smart decisions about talent, HR needs to effectually leverage data. When equipped with metrics that are suitably designed and easy to interpret, HR can render managers with analytics to make decisions which will not only improve operations nonetheless also create systemic advantages. Data and sophisticated analysis are brought in the dynamics to effectively handle people-related issues viz., recruiting, hiring and promotion, performance evaluation, leadership, collaboration, job design, and compensation. The curriculum is of an introductory nature to the theory of people analytics. It is not intended to prepare learners to perform complex talent management data analysis. At the conclusion of this course, you will be able to understand that how and when hard data is operated to make soft-skill decisions about hiring and talent development; therefore, you may

level yourself as a strategic partner in the company's talent management decisions. The course will help students in three distinct ways. One, it will provide students with the latest grounding in current evidence on managing people, providing a knowledge base which shall ensure that their future management is led by the best practices. Second, develop the understanding and skills that are necessary to be thoughtful, critical consumers of data on people management, allowing them to make an in-depth analysis as they make people decisions. Third, provide direction and practice in conducting people analytics, preparing students to gather their own data, and making students more skilled analysts. These goals will be pursued through a mixture of case discussion, lecture, and hands-on exploration of a variety of data sets. The course is intended to introduce you to the fact that Organizations flourish when the people who work in them flourish. Analytics can help make both happen.

MGT642 - Strategies for Firms in Emerging Markets Credits: 1.5

This elective course looks at Emerging Markets and firms therein. Often firms in Emerging markets have different environmental contexts, resources and capabilities and hence different strategy development as compared to developed market firms. The course "Strategy for Firms in Emerging Markets" is specifically designed to introduce students to these market contexts and to the relevant strategies of firms operating in emerging markets, from the lenses of small local firms, local giants, how the local firms can globalize and how firms from foreign markets can enter the emerging markets.

MKT103 - Marketing Management

Credits: 3

This course aims to introduce students to the basics of marketing. It is meant for students of all disciplines, including but not limited to arts, commerce, business, sciences, engineering who are interested in understanding marketing from academic as well as practical perspective. This course is specifically very important for those who intend to specialise in marketing.

MKT312 - Essentials of Marketing Research Credits: 3

This course will provide a comprehensive introduction to marketing research, and discuss key concepts, processes, and techniques, as well as their applications in marketing. This course will allow students to gain an appreciation of the breadth and depth of the subject and its significance for a business enterprise, whether a start-up or an established company. This course would be sensitive to the needs of undergraduate students with plenty of self-help for students and provide an exceptionally solid foundation to understand marketing research with a managerial orientation.

MKT321 - Marketing of Services Credits: 3

Services sector accounts for more than 50% of GDP in India. But the spectrum is diverse in marketing and/or selling a service due to its intangibility elements. An effective campaign that is well executed and which is linked around what it can do for its customers can help sell a product but marketing a service requires a different approach. Marketing a service requires marketing the "you" the provider and your team's ability to get the service done / delivered well. Marketing

great customer service, tangibalising the intangibles offers a unique and exciting challenge which is different from giving product specifications on a brochure. This course is designed to be an intensive study of the concepts, practices, and development of strategies involved in the marketing of services. The material will focus on the unique aspects of services marketing, such as the attraction, retention, and building of customer relationships, demand management and quality control. The course covers a wide variety of services, including professional and business services. The main objectives of this course are to develop an ability to evaluate, implement and lead effective marketing programs in service companies and organisations.

MKT324 - Retail Management Credits: 3

MKT 324 Retail Management course is offered for students who wish to do Major or Minor in the marketing domain. This course is aimed at teaching the fundamentals of retailing by introducing the students to concepts like online grocery retailing, category management, merchandising, retail branding, artificial intelligence in retail, retail supply chain, retail formats, store loyalty, retail pricing and shopper marketing. The course brings to light the changing dynamics of the retail industry with a focus on the Indian context. Students will also be exposed to the adoption of retail management across different countries, especially the American as well as the European perspective.

MKT341 - Marketing Strategy for Consumer Behaviour Credits: 3

The modern day marketing has become consumer

need centric. Marketing strategists across the globe use consumer insights for launching and modifying their product or services. This course takes into account the key factors such as consumer motivation, perception, learning and their personality. This course also provides the students with information on key marketing processes such as consumer decision making, culture's influence, consumer research and basis of market segmentation. This course and its content would help students to understand the logic behind marketing strategies which are based on the consumer/s behavior.

MKT352 - Advertising: Crafting Contagious Content Credits: 3

This is an undergraduate level course focusing on the principles of advertising from content design, creativity and business value creation perspective. It covers advertising and media concepts, psychology, composition and persuasion, typography, copywriting, and brand communication. The course will cover advertising in India and fundamentals of form, function, and consumer behavior. Persuasion techniques such as motivation, organising messages, communicating with images, tapping into connotations, associations, and context will be covered. Throughout, the emphasis will be on creativity in internal as well as external communication that creates value for a profit or a non-profit entity.

MKT501 - Products, Brands and Markets Credits: 3

In this course, each of the Ps of the marketing mix are studied in-depth through the viewpoint of customers, competition, company and context (4Cs). The course particularly focuses on the

customer whether B2B or B2C. It takes into account the heterogeneous nature of consumers and their varying wants, needs and buying habits. There is a focus on data-driven decision-making and how to assess market situations through these techniques. The course is designed to induce students to think critically about the marketing environment and its impact on the society. Discussion on different aspects of marketing such understanding consumer behaviour. as segmentation and positioning, marketing mix, relationship marketing, marketing communication tools and contemporary marketing practices exposes students to different marketing related decision scenarios. Socially responsible marketing, technology enabled marketing strategies and the importance of ethics are discussed and debated during the course. This course is designed to enable students to realize the value of marketing in an organization, not just as a function but as a process involving the entire organization and a system which connects a firm to its customers. The course encourages students to engage in the classroom through participation based on pre-readings and team projects. It provides them with advise, space and resources to discuss and apply all the marketing concepts. In this course, the students learn nuances of marketing management such as marketing environment, needs, wants and demands, understanding consumer behavior, segmentation, targeting and positioning and introduction to marketing mix, importance of online and offline promotions, services and their uniqueness, relationship management and customer value analysis. The course brings students to think critically about the marketing domain as a whole and its impact on business and society.

MKT601 - Business to Business Marketing Credits: 3

In the modern economy, behind every customer transaction lies numerous B2B transactions. Most of the concepts of consumer marketing apply to B2B Marketing, however the differences need to be explored. Advent of the internet has broadened sales and importance of digital marketing in business, thereby making this course imperative. The course introduces the students to branding and innovation, market segmentation, managing the market channels in a dynamic B2B business. A part of the course also introduces the students to pricing, target positioning with a focus on marketing communication and will touch upon some of the effects of pandemic in a B2B business. This enable course will enhance the skills of the students to understand B2B marketing through projects of real life companies. It will enhance the skills to sense the bigger picture behind the B2B Model. Students will get hands on experience while working on project of B2B companies and apply various skills learnt through cases of B2B companies to solve business problems.

MKT623 - Marketing the Intangible Credits: 1.5

Marketing intangible offerings requires a different approach than marketing physical products. By focusing on the benefits, creating a strong brand, leveraging social proof, and using targeted messaging and content marketing, one can effectively market their intangible offering to potential customers. Intangible offerings are everywhere and all pervasive. A Consumer comes into contact with them daily. An intangible service is a service that cannot be physically touched or seen, such as consulting, education, banking, or healthcare. These services are typically performed by professionals or companies, and are often customized to meet the specific needs of individual customers. Many product driven organizations today have a strong service oriented intangible component. It is, therefore, becoming increasingly important to focus on how to best manage and market these. This course demonstrates why and how the intangible market offerings require a distinctive approach to marketing strategy for development and execution and how the intangible service aspects need to be paid attention to for a product firm.

MKT625 - Business of Sports - Marketing and Consumer Behaviour Perspective Credits: 3

The business of sports is large, multi-dimensional, unique and interesting. The global sports market, comprising of infrastructure. events. manufacturing and retail of sports goods is estimated at around USD 700 billion. The sports industry is significant not just due to its size but also due to its close association with other sectors of the economy like education, real estate and tourism. This industry contributes to the general health and well-being of a country. Business of Sports - Marketing and Consumer Behaviour Perspective course aims to introduce students to the field of sports marketing. With learnings from this course, students will be able to analyze and apply marketing management principles in industries pertaining to sports. Sports management is a burgeoning industry in India and offers great career opportunities for professionals.

MKT631 - Sales and Distribution Management Credits: 3

The course is designed as a detailed investigation of the sales management process. It balances the practical and academic while providing a foundation for understanding the sales management function or building a marketing career. Issues covered include the sales process, recruiting, compensation, training and sales force design.

MKT642 - Interdisciplinary Approach To Consumer Understanding Credits: 3

This course will help students understand consumers at a deeper level, using concepts and interdisciplinary methods. Understanding consumer behaviour needs an interdisciplinary approach - concepts and methods from several disciplines like neuromarketing, cognitive psychology, behavioural economics, anthropology, sociology, and more. Consumers often make irrational choices. Decisions are based on emotions and unconscious motivations – not only on rational logic. Consumer choices are implicit not explicit. Consumers cannot often express their motivations in response to traditional marketing research surveys. This is because consumers either won't say why they made some choices (as the answers might not sound logical and reasonable) or they can't say (as choices were made at an unconscious level and they themselves do not know why they choose a brand). The course will draw on the works of several neuroscientists and behavioural economists like Daniel Kahneman, Richard Thaler, and Dan Ariely. We will use behavioural economics experiments ('Nudge' as Richard Thaler calls it) to see how subtle interventions influence brand choices. We will explore how ethnography – a method of immersing oneself in consumer lives (used in anthropology and sociology) - can help us get under the skin of the consumer and observe the role of products and brands in consumer life, as lived and not as claimed in surveys.

MKT651 -	Integrated	Marketing
Communication		
Credits: 3		

Students will be introduced to marketing communication tools such as advertising, promotion, social media platforms and sales promotion which are developed into integrated marketing communications plans. Integrated Marketing Communication (IMC) is one of the most important communications trends adopted by companies today. With an increase in global competition, technological advances, cluttered media environment and more informed customers, it is important for businesses to make a powerful impact on target audiences and markets. IMC is one such step towards an integrated approach to achieving efficiency by synergizing various tools of marketing communications.

MKT653 - Digital Marketing Credits: 3

The digital marketing course aims to cover the what, why, and how of major current digital marketing approaches including online listening and monitoring, search engine optimization, search ads, email marketing, and participating in social media. The course is woven around three key messages viz. How to establish habits for keeping up to date on emerging digital technologies relevant to business and to marketing, how to rise to the challenge of developing strategy to guide tactics and how to identify data sources to define and track performance indicators for a firm's digital marketing activities. The course aims to familiarise participants with key aspects of digital marketing. The participant is expected to gain a

beginners and working knowledge in the digital marketing domain and develop an understanding of the framework on how online marketing operates.

MKT654 - Strategic Brand Management Credits: 3

Which brands make the customers happy? What draws the customers to these brands? How do companies create compelling brand experiences? How could you cultivate a brand that fosters customer engagement? This course takes a customer-centric approach to explore such questions with the goal of identifying the ingredients for building and managing inspired brands. To bridge theory and practice, the course interweaves lectures, case discussions, guest lectures and in and out-of-class experiential exercises.

PRJ679 - Route Camp Credits: 9

RES601 - Quantitative Research Methods Credits: 1.5

This course introduces some of the key basics of inferential statistics such as hypothesis testing, analysis of variance, and regression analysis.

STA100 - Probability Credits: 3

Probability Theory is the study of chance. It forms an important pillar of which statistics & data science have been built. This course is an introduction to probability for a diverse audience. The course covers the fundamental concepts & basic examples, assuming no prior knowledge of the subject. The major topics include: Discrete & Continuous sample spaces & probability; random variables, distribution, independence, expectation, conditional expectations & probabilities, generating functions & limit theorems.

STA101 - Introductory Statistics Credits: 3

This course provides an introduction to the elementary concepts of probability and statistics with specific reference to their applications to business, economics and management. Topics covered include: probability distributions, Bayesian inference, hypothesis testing, confidence intervals, sampling methods, experimental designs and linear regression

TOD205 - Database Management for Managers Credits: 3

The course covers three major stages of development of a database management system – DBMS, Relational DBMS and Object RDBMS, starting from the concept of data and database. Without making the course too jargon-heavy or technical, the aim is to guide students to design and optimize their own database designs for a specific system of their choice. The course proceeds with the progress of group projects.

TOD210 - Business Analytics Credits: 1.5

In today's world effectively presenting data analytics in a compelling narrative to a particular audience is essential for managers. Data Analytics Lab teaches the fundamentals of data analytics, data visualisation, and communicating effectively with data. The course is about understanding data, data structures. The course focuses on tactics and strategies related to exploring, analysing, delivering, and communicating data. There will be several exercises using EXCEL and R, which will help students understand how to work with data in a real-world context. The course has a strong practical orientation, emphasizing critical thinking skills, the ability to ask the right kinds of questions for data analysis, and the creative aspects of designing a data analytics approach capable of delivering a convincing analysis that would support decision making.

TOD212 - Decision Sciences Credits: 3

Everyone makes decisions but very few think of building a method to their decision making. The course is designed to help students understand how to make better decisions. The course brings in the concepts of management science with the intention of helping students achieve better clarity in their decision making by understanding available information and the choices therein. The course aims to help students understand data better and apply logical and solid methodologies to arrive at the best possible decision given the information available

TOD221 - Operations Management Credits: 3

To focus students' attention to the necessity of great operations to drive excellence (manufacturing & services). Operation deals with the firm's ability to successfully and competitively transform raw inputs (land, labour, materials, capital, information etc.) into viable goods & services. The firm focuses on remaining competitive & innovative through excellent operations.

TOD301 - Simulation Modeling Credits: 3

Use of mathematical models helps in optimization and decision making for discrete or continuous stochastic processes. The course aims to enable students to identify real world problems appropriate for simulation, and to help them develop skills to conceptualize simulation models.

TOD310 - Predictive Analytics for Business Credits: 3

This course is all about learning and applying knowledge of statistical model building. Students are introduced to some very basic techniques of machine learning and AI.

TOD322 - Supply Chain Management Credits: 3

Today's firms need to create & manage a synchronized supply chain to ensure all value adding competencies of the suppliers are transferred to the customers. At the same time, it is important that the supply chain in linked to the overall strategy of the firm and closely linked with achievement of the strategic goals. This course provides the understanding of the fundamental concepts of Supply Chain Management. The topics covered include inventory management, coordination, demand and supply planning & strategic sourcing

TOD324 - Service Operations Management Credits: 3

India has the fastest growing (9.2 percent in 2015-16) service sector in the world contributing about 66 percent to the Indian GDP. Operational excellence is critical for success in many service industries today, global competition and rapidly evolving information technology. However, understanding service operations is not easy. Services are intangible, highly variable, not storable or transportable and often involve distributed operations with a significant amount of customer contact. This means that most service operations look quite different than manufacturing operations, and they often require specialized analytical frameworks and tools.

TOD326 - Project Management Credits: 3

In today's world, the discipline of Project Management is a powerful tool that helps organizations navigate their way effectively through times of change and uncertainty. An organization with a project culture is one that knows where it is going, is focused on results and has a professional team who knows what is expected of them. Professionals & organizations working or desiring to start a new venture in diverse fields require an understanding and insight of Project Management concepts and methods. Projects are vital and often businesses and various functions start with this management operation. Initial activities within a function also start with projects, for e.g. Launching a new product in the market or implementing ERP within the organisation. The products are developed at lab scale, tried at pilot scale and produced at plant scale. To handle all these activities later in their careers, management students have to learn Project Management techniques and through planning and control techniques to execute projects.

TOD501 - Probability and Statistics

Credits: 1.5

In today's business world, data is overwhelming. Every business requires its managers to manage & analyse reams of data and arrive at better decisions. A manager who does not rely on data driven decision making will soon become extinct. The course introduces basic statistical tools and techniques and its applications to several areas of research and practice in public policy and management. The sessions are designed for hands-on problem solving manually and then using statistical software.

TOD504 - Mathematical Methods for Economics Credits: 3

This is a core course for all first year MA Economics students. Contemporary graduate level studies in economics are incomplete without the skills to apply mathematical tools to represent and analyse economic theory as well as to interpret and find solutions to the economic problems. Before students can use these mathematical techniques at advanced level, it is essential that they are well acquainted with the concepts and tools of mathematics, ranging from two-variable single equation models to multivariate simultaneous equation systems and set theory to optimisation techniques. This course covers such range of topics, and prepares the students for further application of mathematical models in all fields of Economics.

TOD512 - Decision Science Credits: 1.5

Everyone makes decisions but very few think of building a method to their decision making. The course is designed to help students understand how to make better decisions. The course brings in the concepts of management science with the intention of helping students achieve better clarity in their decision making by understanding available information and the choices therein. The course aims to help students understand data better and apply logical and solid methodologies to arrive at the best possible decision given the information available.

TOD522 - Supply Chain Management Credits: **1.5**

Today's firms need to be more dynamic to remain competitive. It is important to not just focus on their own competencies but also create a synchronized supply chain to ensure all value adding competencies of the suppliers are transferred to the customers. At the same time, it is important that the supply chain in linked to the overall strategy of the firm and closely linked with achievement of the strategic goals. This course provides the understanding of the fundamental concepts of Supply Chain Management. The topics covered include inventory management, coordination, demand and supply planning & strategic sourcing

TOD526 - Project Management Credits: 2

In today's world, the discipline of Project Management is powerful tool that will help organizations navigate their way effectively through times of change and uncertainty. An organization with a project culture is one that knows where it is going, is focused on results and has a professional team who knows what is expected of them. Professionals & organizations working or desiring to start a new venture in diverse fields require an understanding and insight of Project Management concepts and methods. Projects are vital and often businesses and various functions start with this management operation. Initial activities within a function also start with projects, for eg. Launching a new product in the market or implementing ERP within the organisation. The products are developed at lab scale, tried at pilot scale and produced at plant scale. To handle all these activities later in their careers, management students have to learn Project Management techniques and through planning and control techniques to execute projects.

TOD531 - Analytics Lab Credits: 1

In today's world effectively presenting data analytics in a compelling narrative to a particular audience is essential for managers. Data Analytics Lab teaches the fundamentals of data analytics, data visualisation, and communicating effectively with data. The course is about understanding data, data structures. The course focuses on tactics and strategies related to exploring, analysing, delivering, and communicating data. There will be several exercises using EXCEL and R, which will help students understand how to work with data in a real-world context. The course has a strong practical orientation, emphasizing critical thinking skills, the ability to ask the right kinds of questions for data analysis, and the creative aspects of designing a data analytics approach capable of delivering a convincing analysis that would support decision making.

School of Arts and Sciences

BIO107 - Concepts of biology Credits: 3

Concepts of Biology is an introduction to biology for non-biology majors and covers all the major concepts of biology in a single semester. This course aims to provide the necessary information and knowledge about biology that is conceptual, easy to understand, and meaningful in daily life. Knowledge gained in this course will allow the student to negotiate many of the topics and major advances in the biological and biomedical sciences that appear in the daily media, and which play an important role in our lives. Along the way, students will gain an understanding and appreciation for the diversity of life. The topics covered in this course include modern biology: cellular and molecular basis of life; cell division, genetics, and heredity; and biotechnology. At the level of the organism the topics include: evolution and diversity in plants and animals; animal tissue and physiology; and ecology. No prerequisites are required. This course satisfies the general educational requirement (GER) for the life sciences. Biology majors and minors cannot register for this course, but instead are required to register for BIO 101, Introductory biology.

BIO791 - Research Rotation II Credits: 4

BIO101 - Introductory Biology Credits: 3

Introductory biology is a gateway course that is essential for all biology majors and minors. A clear comprehension of the material in this course is essential for the successful completion of other courses in biology. The course covers modern biology at the molecular and cellular level and includes biological macromolecules, the biochemical and biophysical processes in respiration, energetics, metabolism, photosynthesis, cell signaling, and cell reproduction. These fundamental topics in turn lead to the genetic basis of life with classical and modern understanding of inheritance, an understanding of genes, DNA, RNA, and proteins, in sexual reproduction. The initial part of the course concludes with an introduction to biotechnology and genomics with an emphasis on laboratory techniques, genome mapping, and proteomics. The second part of the course applies our understanding of modern biology, including biotechnology, to viruses and single celled organisms such as prokaryotes (bacteria and archaea), protists, fungi, and to seed and seedless plants. No background is assumed other than basic chemistry and biology at the school level. This course can be taken by non-biology students and satisfies the general education requirement (GER). Students cannot register for both Introductory biology and BIO 107 (Concepts of biology).

BIO106 - Introductory Biology practical Credits: 1.5

Biology is a branch of science dealing with studies of living organisms. This course will enable students to be aware about laboratory instruments, biosafety measures and microscopy. The course also focuses on details regarding the diversity of life by studying various animals, plants and microbes. The course will help students get an idea of using the principles of Microscopy, Microbiology, Cell Biology, Classification, Genetics and Molecular Biology in brief.

BIO200 - Human Physiology Credits: 3

This is an introductory undergraduate course aimed at teaching the fundamentals of human

physiology by introducing the students to the different organs and organ systems of the body. Students learn the important organ systems of the body and are also fostered to correlate the functioning of different organ systems with the anatomy as well as diseased conditions. This course is aimed at preparing the students for critical understanding of the human body and correlates their learning with the molecular biology and cell biology courses in the later semesters.

BIO203 - Biochemistry and Genetics Practicals Credits: 3

Biochemistry •Paper Chromatography of plants biomolecules of •TL Chromatography estimation of carbohydrates •Oualitative •Qualitative estimation of proteins and other biomolecules •Spectrophotometric estimation of Nucleic acids •Spectrophotometric estimation of proteins and biomolecules Genetics •Study of Mendelian Inheritance and gene interactions (Non-Mendelian Inheritance) using suitable examples. •Study of various stages of mitosis using cytological preparation of Onion root tips. •Study of Human Karyotypes (normal and abnormal). •Chromosome Banding •Transduction •Conjugation.

BIO205 - Molecular biology and Bioinformatics practical Credits: 3

BIO206 - Physiology Laboratory Course Credits: 1.5

The practical course on physiology will cater to the hands-on training of the students in the field of physiology (particularly Human Physiology). The students will learn to prepare blood smear, stain blood smear, perform total count of RBC, total and differential count of WBC from their own blood (students will use haemocytometer for counting). Students will also perform Body mass index and Body Surface area measurements and learn to measure blood pressure under different conditions. They will also learn to identify different human tissues under microscope using prepared permanent slides.

BIO209 - Basic Biochemistry Credits: 3

Biochemistry is the study of biomolecules that make us. This introductory course in biochemistry intends to provide a solid foundation about the major classes of biomolecules: four carbohydrates, proteins, nucleic acids and lipids. The structure of these biomolecules from basic building blocks to large polymeric entities will be covered in detail. The correlation between the structure of a biomolecule and its specific function inside the cell would be emphasised. Finally, enzymes which are at the heart of biochemistry and biochemical reactions inside cells would be described in terms of their structure, kinetics, regulation and inhibition.

BIO211 - Molecular Biology Credits: 3

Molecular Biology is an introductory undergraduate course, aimed at teaching the fundamentals of cell and molecular biology by introducing the students to the concepts of organization of DNA inside the cells, reinforcing the central dogma of life upon them, structure and properties of DNA and RNA, organization of genetic material inside the cells, replication, transcription, translation, recombination and repair. This course is a core subject in the DBLS's iMSc program. It is a course which requires basic knowledge of biology and is aimed at preparing the students for critical understanding of molecular biology and the interdisciplinary nature of the subject. The strong interdisciplinarity in the subject will aid the student towards a strong foundation in life sciences.

BIO213 - Basics of Bioinformatics Credits: 3

The twenty-first century is the century for biological sciences and data analytics would play a significant role in harnessing the full potential of this field. Life, at the molecular level, involves interaction between different biomolecules such as DNA, protein, etc. This course will introduce the key concepts in the context of these biomolecules and present in detail their sequence features and other important characteristics. Algorithms designed to compare the sequence of proteins would also be discussed. Students would have an opportunity to apply various computation methods – including but not limited to dynamic programming, data visualization, database management, and graph theory - to biological data. The course would introduce key bioinformatics concepts such as sequence alignment, comparative genomics, data mining etc. This interdisciplinary course aims at helping students to develop a perspective on the application of computers to biological sciences. Students should be proficient with basic programming in python. Biopython and other biorelated python methods will also be introduced in this course.

BIO310 - Genetics Credits: 3

This course covers principles of prokaryotic and eukaryotic cell genetics. Emphasis is placed on the molecular basis of heredity, chromosome structure, patterns of Mendelian and non-Mendelian inheritance, evolution, and how does it affect the different allelic interactions, as well as its applications in various fields of biological sciences like Epigenetics and Cancer biology. Upon completion, students should be able to recognize and describe genetic phenomena and demonstrate knowledge of important genetic principles.

BIO319 - Physiology of excitable cells Credits: 3

This course is a rigorous introduction to the physiology and biophysics of excitable cells. These cells include neurons and muscle cells (skeletal and cardiac). Three broad topics will be covered: 1) the biophysics of electrically excitable membranes, 2) the cause and effect of membrane excitability on cell signalling, and 3) synaptic processes. Topics include electrochemical and osmotic equilibrium, the role of passive and active channels in determining the membrane potential, action potential generation and propagation, experimental methods to measure ion channel properties and the electrical properties of semipermeable membranes, and the process of neurotransmitter release at chemical synapses. These concepts will be extended to excitability in skeletal muscle, and cardiac muscle and pacemaker cells, muscle contraction, and regulation of muscle contraction. If time permits, we will cover the electric organ of electric fish. This is a course in cellular physiology and biophysics, and so it covers basic principles and mechanisms at the cellular level rather than systems. At the end of the course, students will be able to understand the physiological and

biophysical mechanisms by which nerve and muscle cells function. This course is a prerequisite for BIO 320 (Neurobiology) which covers nervous system function in depth. BIO 319 and 320 are offered in alternate years.

BIO500 - Recombinant DNA Technology Credits: 3

This course will provide an insight to the application and interpretation of high-throughput molecular biology methods used to produce highvolume biological data using genomics, transcriptomic, proteomics, and metabolomics, which will allow to analyze the components of a living organism in their entirety and provide new insights into the complexities of organism function. The applications of these technologies will allow the thoughtful experimental design, data collection, analysis and interpretation. This course will provides theoretical bases to properties and applications of versatile DNA modifying enzymes, cloning strategies, vector types, host genotype specificities for selection and screening of recombinants and/or recombinant transformants. The knowledge gained can be applied to a range of disciplines in biology, from disease genetics, biology. biomedicine. agriculture and fisheries.

BIO543 - Developmental Biology Credits: 3

How does an entire organism develop from a single cell? This is the question that the course will try to answer. The course will cover organism development starting from the zygote, embryonic development, tissue specification & organogenesis, concept of stem cells as well as developmental genetics. This is an advanced course that builds on basic cell biology and genetics courses.

BIO553 - Animal Behaviour Credits: 3

Do you want to understand how and why animals behave the way they do, and how we test hypotheses about behaviour scientifically? This course provides an introduction to the complexities of animal behaviour, and how it is studied. Students will explore the various behaviours animals adopt in order to meet the challenges of their daily lives. We begin with how animals learn and communicate with each other, then move on to discuss how they find food, avoid predators, choose their mates, and rear their offspring. This course is aimed at anyone looking to broaden their understanding of animal behaviour beyond nature documentaries or a typical high school education. No previous knowledge is required, only curiosity and enthusiasm for the subject.

BIO554 - Forensic Biotechnology Credits: 3

Forensic Biotechnology is an elective course designed at teaching the application of biological sciences in the field of forensic investigation process using molecular biology techniques. This course covers the Introduction to Forensic Science, cutting-edge development of forensic biotechnology, DNA fingerprinting its ethics, rules and forensic aspect for identification purposes, single nucleotide polymorphisms, ancestry, and phenotypic markers. In this course, the students would also get acquainted with various basic and latest molecular biology techniques that are being used for DNA profiling. This is an advanced level course aimed at preparing the students for better understanding of the DNA profiling, certification and its importance into the Indian Judiciary System.

BIO598 - Master Thesis I Credits: 6

The course is designed for the Integrated Master of Science in Life Sciences students to provide experience in scientific research work, from the inception (identifying the research question), design and execution of the experiments, data analysis (including statistical analysis) and scientific communication including result interpretation, report writing and presentation. This course can be offered by any faculty of Ahmedabad University to IMS students. The topic of the research project (related to Life Sciences) for the course will be decided by the faculty with whom the student is allotted to do the course.

BIO600 - Evolutionary Biology Credits: 3

Dobzhansky (1973) famously argued that "nothing in biology makes sense except in the light of evolution". Evolutionary Biology is the study of the changes in life forms over time changes that have occurred over millions of years as well as those that have occurred over just a few decades. In this course, we will look at the various mechanisms of evolution, how these mechanisms work, and how change is measured. This course will begin by reviewing the evolutionary concepts of selection and speciation, phylogenetics and history of life. We will then learn natural selection and adaptation, evolutionary processes, and genes-genomes-phenotypes. The course will wrap up with a look at the evolution and modern society. At the end of this course, students will have a better understanding of the evolution of life. Also, this course will prepare students for

future study and research in macroevolution, microevolution, genetics, behavioral biology, evolutionary medicine, and computational biology.

BIO790 - Rotation in Lab Credits: 4

BPS103 - Microscopy and Imaging Credits: 3

Microscopy & Imaging is an elective course designed at teaching the fundamentals of microscopy by introducing the students to concepts of optics, principle, instrumentation, Applications of different microscope, sample preparation, staining (if required) and image formation. Students will also be acquainted to the use of microscope in the laboratory through hands on sessions. It is an entry level course aimed at preparing the undergraduate and doctoral students for better understanding about microscopy & its application in biological sciences.

CSC210 - Introductions to Data Structures and Algorithms Credits: 3

The course covers basic data structures and techniques for design and analysis of data structures with a rich set of applications in computer science, computational sciences, and operations research. The course will begin by covering the basic data structures like Lists, Stacks, Queues, Binary Search Trees, Heaps, etc. We will also introduce tools and techniques for computational analysis of these basic data structures. The latter half of this course will cover more advanced data structures such as Height Balanced Search Trees, Hash Tables, and Graphs and introduce divide and conquer algorithms for sorting and searching, and algorithms for graphs. The programming language used in the implementation of the data structures and algorithms is C.

ENV602 - Air Quality Credits: 3

This is an elective course for PhD programme in Physics, PhD programme in Management, and minor in 'Environment and Sustainability'. The course aims at introducing the concept of air pollution and its various components. The course covers important aspects of air pollution such as its dispersion and transport, effects – health and visibility, and methods of quantification. Air quality (AQ) and air quality index (AQI), AQI standards and measurements and quantification using various platforms (in-situ, modelling, and satellite remote sensing) are discussed. A unique component of this course is field work related to AQ measurement using low-cost sensors and furthermore its scientific analysis leading to AQI.

ETH201 - Ethics Credits: 3

Ethics, as an area of philosophical inquiry, deals with the question of how we ought to act in any given situation. In this introductory course, we will explore a set of influential contemporary moral theories, and learn how these can be applied to some of the most pressing moral issues of our time. We will address some aspects of the following questions. Is there a criterion for distinguishing between right and wrong? Are morals culturally relative? What is the best human life? What might be the moral bases for accepting or rejecting practices like euthanasia, abortion, affirmative action, and civil disobedience? To what extent are we obligated to assist people in need? How ought we to treat animals? What might an ethical relationship between nations look like? Finally, we will discuss a subset of key ethical issues relating to the fields of engineering, business, neuroscience and psychology, and the natural and social sciences.

FRE111 - Conversational French – I Credits: 3

This elementary French language course aims to equip new learners with the ability to use French for everyday conversational purposes. It aims to expose students to aspects of French culture and history. As an introductory course it aims to engender an appreciation for the language and its culture(s).Students are expected undertake daily practice by revising 1-2 hours a week outside of class.

GER111 - Conversational German I Credits: 3

This elementary German language course aims to equip new learners with the ability to use German for 'everyday' purposes. It aims to expose students to aspects of German culture and history. As an introductory course it aims to engender an appreciation for the language and its culture(s). This is the first of four courses in Conversational German. Students are expected to undertake daily practice by revising 1-2 hours a week outside of class. This language course will have three sessions every week of a duration of 1 hour each. This course is open to all students across the University.

HST201 - Trade and Religion in the Indian Ocean World Credits: 3

This is a global history core course for History Major. The course considers the agency of trade and religion in mediating cultural identities in the Indian Ocean world. Trade involves the exchange of goods. Long-distance trade requires merchants to enter into exchange relationships with people from other cultures. Trade contacts facilitate reciprocal understanding by intersecting with myriad other aspects of human life including religious beliefs. Religion is often defined as a frozen set of precepts, rituals, and moral codes of behaviour. Contrary to this, religion in the early modern period (c. 1500 - c. 1800) exhibited an extraordinary dynamism and fluidity as it moved across geographies. By focusing on trade and religion in the Indian Ocean world, the course discusses the changing perceptions of different social groups as they came into closer contact. The Indian Ocean has been one of the oldest world regions that facilitated trade and cultural interactions. The exchange of goods, ideas, technologies, microbes, and plants was often mediated by merchants, mercenaries, and monks straddling across the Indian Ocean regions. In the early modern period, the diversity of peoples from Southeast Asia, South Asia, the Islamic heartlands, East Africa and Europe made the Indian Ocean an emerging globalising arena that brought multiple cultures and religions to closely interact. This led to the processes of identity formation, dissemination and adaptation of cultural practices, and contestations and compromises in forging an open, cosmopolitan society. Understanding this substratum of the historical past will enable us to better understand globalisation.

HST101 - Ahmedabad as a Gateway to the World Credits: 3

The city of Ahmedabad has been at the crossroads of major historical currents. A key commercial centre of western India. Ahmedabad was at the vanguard of industrialisation in modern India. Ahmedabad via the coastal port cities such as Surat was a gateway to the sea routes of the Indian Ocean via the Arabian Sea, home to influences from West Asia as well as peninsular South Asia. Although the city functioned as a political and administrative centre, it had a strong tradition of craft goods production, merchant entrepreneurship, and banking and financial services. It maintained thriving trade contacts with neighbouring towns and port cities as well as imperial centres at Delhi and Agra. In 1700 AD, Ahmedabad was, by some estimates, the sixth most populous city in the world[1]. Today, it continues as one of the most populous cities in India, a key node of national politics as well as business and urban development initiatives and emblematic of the opportunities and challenges before contemporary Indian society, wherein modernist development paradigms have been superimposed on traditional social structures. The course will help students understand the city as an arena for economic activities (industry, trade and commerce, and informal work), merchant communities, entrepreneurship, city life and culture, and global engagement over the centuries. It will also examine the causes and consequences of conflicts over material and symbolic resources, which have been key to the social organisation of the city. It examines various efforts at urban development charting the city's built form for the future. Through a combination of lectures, classroom discussions, and projects the course encourages students to analyse these historical and contemporary processes in Ahmedabad in the wider historical context of Gujarat. Through these experiences, students will receive an introduction

to disciplinary concepts and theories that will be built upon systematically by later courses in the student's chosen major.'Ahmedabad as a Gateway to the World' is a mandatory course for all BA students majoring in History or SPS (Social and Political Sciences), and for all Integrated MBA students. [1] According to the Financial Times. See https://www.youtube.com/watch?v=pMs5xapBe wM&t=5s.

HST220 - Science, Technology, and the Making of the Modern World Credits: 3

The world as we know it today is characterised by a high degree of globalisation, by the political and economic prominence of industrialised nations, and by the primacy given to science and technology in most societies. How did such a world come about? The course explores this question by tracing the development of modern science and technology and its relationship with imperialism and other engines of globalisation in the last five centuries. In it we will look at a range of viewpoints, thus trying to move away from a purely Eurocentric account.

IHS701 - Key Concepts in Social Theory Credits: 3

JAP111 - Conversational Japanese - I Credits: 3

This course will serve as one of the core/method/major specific components for Bachelor of Art (BA) in Philosophy, History and Languages (PHL) and as a free elective and General Education Requirements (GER) for students across the schools at Ahmedabad University. Nowadays, the world becoming flat

and interconnected, people and goods move around across borders more than ever before. People even migrate and settle down in a different country. In Japan, the most aging society on the globe, there are many foreign employees working in a variety of fields, from social service to computer and engineering sciences. The number is increasing every year .This is an introductory language course that helps students understand every life in Japan and make students' life fulfilling for their future by enabling them to build the Japanese language with cultural sensitivities and communication skills for reading, listening, writing, speaking and interacting with people in Japan as well as the people around them such as fellow classmates in the same community and people with different backgrounds and in different situations, such at school, college, work or in their communities and beyond.

JAP211 - Intermediate Conversational Japanese - I Credits: 3

In this course, students will master the fundamentals of the elementary Japanese language equivalent to the N4 and N5 levels of a standardized language exam, the Japanese-Language Proficiency Test (JLPT). Throughout this language training, students will be familiarized with the historical and cultural contexts of Japan. Through a variety of assignments and exercises both inside and outside of the classroom, students will be able to enhance existing Japanese reading, writing, and speaking proficiency. The aim of the course will be to nurture the values of self-discipline, patience, diversity, and inclusiveness among students through the Japanese language.

LIT105 - Urdu Prose and Poetry

Credits: 3

The course teaches the Urdu script and introduces students to well known literary prose and poetry in Urdu. Once command of the script is achieved, the course focuses on reading selections of literary and poetic compositions in Urdu. Students also write their own poetic and literary compositions towards the conclusion of the course to share with the class.

LIT120 - Introduction to Hindi Literature Credits: 3

This course is meant to acquaint the students with the basic literary traditions of the Hindi language. The course will focus on modern Hindi literature .The period starts from the last quarter of the nineteenth century. This course will introduce students to some of the major themes of modern Hindi literature like women, love, sexuality, rebellion, freedom, colonialism and partition. Under this, students will read and analyse various literary texts and get acquainted with sensory and artistic nuances of Hindi literature. The contemporary Hindi language and its literature is the outcome of various social, cultural, and historical transitions that took place in North India over a long period of time. Studying this literature course will contribute to an understanding of the history, culture, and society of the Hindi speaking people . Also, while studying the various literary masterpieces of Hindi, students will learn to recognise the subtleties of literary style, genre, and craft and will be able to place literary sensibilities in cultural, historical, and sociological perspectives.

MAT146 - Intermediate Calculus Credits: 3

This course satisfies the core requirements for some of the students of the Bachelor's programmes in the Economics and Business majors. It may be taken as a GER by students of Bachelor programmes of other disciplines. This course is a second course in Calculus. It broadens and deepens a students knowledge of elementary Calculus. The course covers some applications of definite integrals to Volumes, Arc Length and Areas, Integrals of Exponential and Logarithmic Functions and applications, some new techniques of Integration- including Integration by Parts and Partial Fractions, Differential Equations and Applications, Taylor Series with applications and an Introduction to Partial Derivatives. The applications are drawn from many fields including Economics, Physics and Engineering. The course is aimed at first-year or second-year undergraduate students of any field who have the correct preparation. A familiarity with the contents of Introductory Calculus (MAT 142) is assumed

MAT485 - Introduction to Quantum Computing Credits: 3

Quantum computing is a rapidly emerging interdisciplinary field that draws from physics, mathematics, and computing. It has the potential to revolutionize many aspects of computation as we know it today. Indeed, it has already been theoretically proved that for many applications quantum algorithms would be exponentially efficient than classical algorithms. This means quantum computers will be able to solve many problems that are practically intractable for classical computers. For example, quantum computes would be able to break all the existing public-key cryptographic algorithms used in online banking transactions. This course will provide an introduction to the mathematical framework of quantum computing. The focus will be on understanding how quantum algorithms work, although we will briefly discuss the physical realization of quantum computers towards the end of the course. Several important quantum algorithms will be discussed. Topics covered include quantum logic gates, quantum algorithms including the Deutsch-Jozsa algorithm, Shor's factoring algorithm, Grover's search algorithm, and optical photon quantum computer.

MAT256 - Differential Equations Credits: 3

This course is one of the core requirements for the Bachelor's programmes in Economics and Physics. It may be taken for the GER for other disciplines. This course gives an introduction to differential equations for Undergraduates from all fields who have a knowledge of Elementary and Intermediate Calculus (The contents of MAT 142 and MAT 146 would be enough for this course.) The course covers topics useful for any undergraduate interested in using differential equations to model real-life situations. The course is problem-oriented and the theory is developed so that the student is able to solve problems more effectively. If possible, a lab session will be arranged in each chapter to deepen the student's understanding of the subject.

MAT268 - Introduction to Mathematical Biology Credits: 3

Biological processes typically take place in highly complex environments often involving nonlinear interactions between various participating molecules or species. Despite the

complexity and the presence of thermal noise, biological processes are extremely robust. Although since past centuries scientists have been attempting to find generalized principles that drive these processes, till date, our understanding is far from complete. Mathematical modelling of these complex often helps describe these processes processes precisely and reveal underlying general principles governing observed biological phenomena. The purpose of this course is to provide an exposure to the interaction between Mathematics and Biology at an undergraduate level. The course is appropriate for all students who are passionate about Mathematics and are also curious to learn how life functions at different levels, microscopic or macroscopic. This course would be equally relevant for Biology students who would benefit from gaining mathematical insights on their area of interest and also appreciate how mathematical modelling may help them design experiments in an informed The course will involve building manner. mathematical models based on the mechanism behind a given biological process. solving these models and connecting with what we observe in real life or in experiments. We will be primarily focusing on the following topics Population and disease models Molecular evolution Genetics Introduction to biological networks The details of the biological processes will be explained in the class at an elementary level. About Mathematical Preliminaries: Mathematical tools required to solve various models will be explained/worked out in the class along with examples and practice problems Basic training in MATLAB along preliminary assistance in writing with small programmes will be provided in the class.

MAT312 - Abstract Algebra Credits: 3

The notion of a "group," viewed only 30 years ago as the epitome of sophistication, is today one of the mathematical concepts most widely used in physics. chemistry. biochemistry. and mathematics itself. - Alexey Sosinsky, 1991This undergraduate course focuses on traditional algebra topics that have found greatest application in science and engineering as well as in mathematics. The power of abstract algebra is embedded in its name: it gives us an arena in which we may study disparate mathematical objects together and abstractly, without considering a particular instance or occurrence. For example, the multiplication of numbers, symmetries of a molecule, dance formations, roots of polynomials, Australian kin systems, actions of a Rubik's cube, and loops on surfaces all form groups. The main objects of study, in this course, are groups, which are abstract mathematical objects that reflect the most basic features of many other mathematical constructions. We will also study fields and other abstract mathematical objects, which can be thought of as groups with additional structure. Topics include group theory, emphasising finite groups; field theory, including properties and applications of finite fields.

MAT585 - Introduction to Quantum Computing Credits: 3

Quantum computing is a rapidly emerging interdisciplinary field that draws from physics, mathematics, and computing. It has the potential to revolutionize many aspects of computation as we know it today. Indeed, it has already been theoretically proved that for many applications quantum algorithms would be exponentially efficient than classical algorithms. This means quantum computers will be able to solve many problems that are practically intractable for classical computers. For example, quantum computes would be able to break all the existing public-key cryptographic algorithms used in online banking transactions. This course will provide an introduction to the mathematical framework of quantum computing. The focus will be on understanding how quantum algorithms work, although we will briefly discuss the physical realization of quantum computers towards the end of the course. Several important quantum algorithms will be discussed. Topics covered include quantum logic gates, quantum algorithms including the Deutsch-Jozsa algorithm, Shor's factoring algorithm, Grover's search algorithm, and optical photon quantum computer.

MAT775 - Lie algebras and their applications in quantum physics Credits: 3

Lie groups and Lie algebras are fundamental mathematical structures. This course provides a comprehensive introduction to Lie groups, Lie algebras, and their applications in quantum physics. Lie groups serve as the mathematical framework for understanding symmetries in quantum systems, while Lie algebras provide a powerful tool for analyzing the algebraic structure underlying these groups. The course covers semisimple Lie algebras, including theorems of Lie and Cartan. The course also includes root systems, their classification, and their connection to Weyl groups and Dynkin diagrams. The representations of SU(2) (special unitary group of degree 2) and SO(3) (special orthogonal group of 3). degree thoroughly are examined. Furthermore, the course includes the practical applications of Lie group and Lie algebra techniques to quantum systems, including the

analysis of two-state quantum systems, the behavior of the hydrogen atom, and the dynamics of the harmonic oscillator. This course is specifically designed to be useful for graduate students specializing in physics and mathematics.

MUS101 - Inside Indian Music Credits: 3

This course is taught by Prachi Vaidya-Dublay under the category PVA-GER. "What is Indian? What is Music?" Such questions intrigue us often. MUS101 tries to address these questions by exploring and interrogating the existing genres of Indian Music like Tribal-Folk, Classical-Art, Popular, Devotional and Fusion Music. It focuses on the key principles of music that formulate these genres and connect them to each other, the connection which eventually weaves the complex and diverse fabric called 'Indian Music'. The course also tries to understand the relationship of culture and music through the dynamics of above mentioned genres. This course combines Theory and Practice thus students are expected to perform some vocals and also do some writing during the course.

MUS103 - Culturing the Voice Credits: 3

This course is taught by Prachi Vaidya-Dublay under the category PVA-GER. It specially is designed for aspiring Voice Professionals. It tries to explore the Idea of Voice on both physical and metaphorical levels. All those who wish to use their voice professionally in their respective fields and careers will find intensive practical sessions in Voice Culture Course useful, which will include Yoga-PraNayaam, Breathing Awareness Exercises and Special Training in Voice and Speech Building. Voice Acting and Story Telling are important segments of this course. Along with the Readings of English Play and Urdu Poetry Recitation, Readings in Hindi, Sanskrit and in some other regional languages also will be encouraged during this course. It may please be noted that this is a Practical Course with some writing required.

MUS104 - Fundamentals of Music and Sound Credits: 3

From simple folk tunes to the highly cultivated Khayal, Dhrupad and Carnatic Music, from lilting Celtic songs to the dazzling polyphonic creations of Western Classical Music, from swing Jazz to modal and free Jazz, the music of wandering minstrels to edgy electronic music - the sheer variety of music is mind boggling. Underlying this diversity are fundamental elements that derive from the physicality of music as sound and its transformation into art. This course is for those who are curious about discovering these fundamental elements of music. Beginning with basic features of sound - frequency, amplitude, duration and wave form – that may be mapped to fundamental musical elements of pitch, loudness, time and timbre, the course will explore elements such as melody, harmony, time, rhythm, texture, dynamics, form, song, instrumentation etc.

MUS105 - A Glimpse into the World of Hindustani Music Credits: 3

Hindustani Music is widely cherished as a sophisticated art music tradition of North India. It is complex in its practice and pedagogy, history and socio-cultural dimensions. This course offers an introduction to aspects of its contemporary practice, its recent history and socio cultural contexts. The course will cover basic categories of raga, tala, composition and improvisation through lectures, listening to music and practice; issues arising from translation will be discussed. Socio cultural aspects such as Gharana, Guru Shishya parampara and pedagogy will also be discussed. The course includes a practice component of teaching compositions in select ragas and talas.

PER101 - Introduction to Persian I Credits: 3

This course is an introduction to modern written and spoken Persian. Students acquire the skills necessary to read, write, and speak Persian at an elementary level. This course is the first in a twopart sequence. The course works through approximately half of W.M. Thackston's Introduction to Persian. Students learn foundational grammatical forms, build essential vocabulary, and become comfortable reading and writing the Persian script. Students practice exercises inside and outside class that build on the lessons from the textbook. Students are expected undertake daily practice outside of class for at least 30 minutes.

PHI 260 - Political Philosophy Credits: 3

The purpose of this course is to learn to think critically about how people should be governed. In the first part of the course, we will familiarize ourselves with many of the most compelling and widely-held answers to this question from Plato to today, each based on a conception of the fundamental purpose or purposes of political communities. We'll consider some of the strengths and weaknesses of these theories. In the second part of the course, we will apply these theories to particular issues relevant to India by reading selections from Parts III and IV of the Constitution of India, on Fundamental Rights and the Directive Principles, in conjunction with some related philosophical works. We will ask whether different theories must give different verdicts about some of these issues and whether we should agree with them. Among the issues we will consider are discrimination, equality of opportunity, minority rights, and the distribution of resources. This course is for any student interested in the topic, especially students of Philosophy, History, and Languages, students of Social and Political Science, and students interested in continuing conversations initiated by the Democracy and Justice foundation studio. It is a 200-level core course for students pursuing a Major in Social and Political Science and a major/minor elective for students pursuing a major in PHL or a minor in Philosophy.. As PHI 260 there is no prerequisite. As PHI 360 the prerequisite is one other philosophy course at any level.

PHI 360 - Political Philosophy Credits: 3

The purpose of this course is to learn to think critically about how people should be governed. In the first part of the course, we will familiarize ourselves with many of the most compelling and widely-held answers to this question from Plato to today, each based on a conception of the fundamental purpose or purposes of political communities. We'll consider some of the strengths and weaknesses of these theories. In the second part of the course, we will apply these theories to particular issues relevant to India by reading selections from Parts III and IV of the Constitution of India, on Fundamental Rights and the Directive Principles, in conjunction with some related philosophical works. We will ask whether different theories must give different verdicts

about some of these issues and whether we should agree with them. Among the issues we will consider are discrimination, equality of opportunity, minority rights, and the distribution of resources. The faculty, who will be teaching this course, is Professor Chandler Hatch.

PHI100 - Introduction to Western Philosophy Credits: 3

In this introductory survey course, we will discuss key issues in modern Western metaphysics and epistemology. We will concern ourselves with some aspects of the following questions: What is the nature of the real? What is knowledge? How do we gain knowledge? What are the limits of our knowledge? What is the nature of space and time? What is the nature of our minds, and how do they relate to our bodies? What makes us the same person over a period of time? Are we really free in our choice of actions? Can we rationally prove the existence of God?

PHI120 - Introduction to Ethical Theory: Virtues, Vices and Values Credits: 3

This course introduces students to some of the main themes of philosophical ethics. Students will approach the subject through a close study of classical readings by Aristotle, Immanuel Kant, and John Stuart Mill, as well as contemporary work by such authors as Julia Driver, Amartya Sen, and Margaret Urban Walker. Among the fundamental questions to be discussed are 'what makes a life go well or poorly?', 'what makes a person good or bad?', and 'what makes an action right or wrong?'. This is a core course for students minoring in philosophy and an elective for students majoring in PHL. Other students may take the course to fulfill their GER requirements.

PHI200 - History of Modern Philosophy: Metaphysics and Epistemology Credits: 3

In this survey course, we will explore topics in metaphysics and epistemology in the key texts of seventeenth- and eighteenth-century Western philosophy. This period is the era of the emergence of the natural sciences, and several philosophical debates from this time remain influential in contemporary philosophy. We will concern ourselves with the following questions: What is the ultimate structure of reality? How might we think of the nature, source and limits of knowledge? Can we rationally prove the existence of God? What is the nature of space and time? How does the mind relate to the body? What is the nature of personal identity? Are our actions really free? In addressing these questions, we will learn about a variety of philosophical positions like rationalism, empiricism, idealism, dualism, monism, and materialism. This course is open to all students. It is a core course for students pursuing a Minor in Philosophy.

PHI215 - Introduction to Indian Philosophy Credits: 3

This course introduces students to the Indian philosophical tradition of darśana-śāstra. In this course, students will be given an overview of the several schools (darśana) that comprise the tradition and will be introduced to some of their important doctrines, texts and thinkers. Students will be introduced to philosophical thinking and concerns (in particular ontology and epistemology, Sanskrit: prameya and pramāņa respectively) by way of focusing especially on three main positions put forth in Vedānta (Advaita), Buddhism (Mādhyamika) and NyāyaVaiśesika. Other main schools Cārvāka/Lokāyata, Jainism, Sāmkhya, Yoga and Pūrvamīmāmsā - and their positions will be discussed primarily in reference to the earlier three. Additionally, students will be introduced also to how these ancient doctrines from many millennia ago are being brought into conversation with contemporary philosophical concerns (in particular, the debate on absolutism and relativism). This is an introductory course on philosophy and no background knowledge is required. Readings during this course will be entirely in English, but several important terms from the primary languages (particularly Sanskrit) will be discussed throughout the course. Knowledge of Sanskrit is strongly encouraged.

PHI235 - Philosophy of Psychology Credits: 3

Philosophy of Psychology is an elective course for BA Psychology majors and can be taken to fulfil requirements for the Minor in Philosophy. Psychologists empirically study mind and behaviour while philosophers (of mind) conceptually analyse and develop arguments about the nature of mind/behaviour. However, there is a cross-pollination between Philosophy and Psychology. Often, the insights developed by philosophers guide the empirical work of psychologists, and similarly, the empirical findings of psychologists have implications for philosophical/theoretical accounts of mind/behaviour. In this spirit, this course discusses the broad theoretical and philosophical implications of the findings of Psychology, particularly with respect to the psychological processes of consciousness, thinking, rationality, free will, and social minds. However, it should be clarified that this course is distinct from traditional "Philosophy of Mind" courses which tend to focus

on the fundamental nature of the mind; this course focuses on the empirical findings in Psychology theoretical (or philosophical) and their sample implications. The of the theoretical/philosophical implications of the empirical findings of Psychology include: (a) Do limited resource models of attention imply that we do not see everything that we could see? (b) Do we need language to think? (c) Do we possess the processes to acquire accurate knowledge about ourselves? (d) Why aren't we always rational? (e) Do we have free will? and (f) What is the role of self-knowledge in understanding other minds?

PHY111 - Classical Mechanics Credits: 3

This introductory course in classical mechanics reintroduces students to basic concepts of classical mechanics, such as Newton's laws, linear momentum, angular momentum, work and energy, as seen in high school but with greater mathematical rigour and physical insights, and including problem solving. The latter part of the course is on the Special Theory of Relativity.

PHY112 - Electromagnetic Theory Credits: 3

Primarily aimed at Physics major students but can be of interest to students from other majors, especially engineering, with a sound preparation of Maths. Electromagnetic Theory course covers the basic principles of electromagnetism which includes experimental basis, electrostatics, magnetic fields of steady currents, electromotive force and electromagnetic induction, Maxwell's equations, propagation and radiation of electromagnetic waves, electric and magnetic properties of matter, and conservation laws.

PHY121 - Laboratory Physics – Mechanics Credits: 3

The Laboratory Physics - I course introduces students to the scientific methods for conducting Physics experiments, including the acquisition, analysis and physical interpretation of data. This course complements the Classical Mechanics course, where students are introduced to fundamental Physics concepts such as energy, momentum, force etc., by incorporating experiments which illustrate the concepts. In most instances students will be required to build the necessary equipment on a very limited budget to perform the experiment. Scientific documentation of each experiment and the findings with an oral presentation and viva is required.

PHY221 - Laboratory Physics – Optics Credits: 1.5

This course is a core course of the BS (Honours) major in Physics programme and is primarily for students majoring in Physics. Optics Laboratory course complements the Oscillations, Waves, and Optics theory course where students learn about wave propagation in different media, geometrical optics, diffraction, interference, polariser and polarisation of light, etc. by incorporating experiments which illustrate such concepts. In some instances, students will be required to assemble or create the instrument and plan the experiment to demonstrate an optics concept. Error analysis, and scientific documentation of each experiment and the findings with an oral presentation and viva is required

PHY310 - Quantum Mechanics I Credits: 3

This is a core course of the BS (Honours) major in

Physics programme and is primarily aimed at Physics major students but can be of interest to students from other majors e.g, Computer Science and Engineering. Quantum Mechanics is probably the most profound scientific development in modern times. Its development and advancement has revolutionised human activities. Be it the electronic instruments we use today, be it the development of solar cells as a renewable source of energy, be it the spectroscopy that we need for any biological or chemical discoveries, there is hardly any sphere of activities that does not need quantum mechanics. In this course the students will be exposed to this subject which involves the most dramatic departure from our understanding of the macroscopic world at the microscopic scales. Students will be introduced the probabilistic concepts in studying the microscopic world which involves both new theoretical developments as well as rigorous mathematical concepts from linear algebra, differential equations and many more. In Quantum Mechanics I, to start with, the failure of classical physics in the microscopic world will be discussed in terms of some very important experiments. Subsequently the idea of quantum mechanics will be introduced. Finally few simple quantum mechanical systems will be introduced and related mathematical concepts will be taught.

PHY314 - Electrical Circuits and Electronics Credits: 3

This is a core course of the BS (Honours) major in Physics programme and is primarily aimed at Physics major students but can be of interest to students from other majors, especially engineering. The course covers the fundamental principles of electricity and electronics including function of various devices such as resistors, capacitors, transistors, amplifiers, and oscillators. Besides this, it also covers different types of circuits, electrical laws governing them, and their applications. The laboratory segment of the course compliments the theory by incorporating experiments which illustrate the theoretical concepts hence will of hands-on approach where students will be required to work on electrical and electronic components to realise a working circuit.

PHY321 - Laboratory Physics – Electronics Credits: 1.5

This course is a core course of the BS (Honours) programme with major in Physics and is primarily for students majoring in Physics. Laboratory Physics - Electronics course complements the Electrical Circuits & Electronics theory course where students learn about topics related to electrical circuits, analog electronics, and digital electronics. This course incorporates experiments which are directly connected with the concepts covered in the theory course and by using a mix of experimental techniques help in further the learnings of the theory course. Students will be required to identify different electrical and electronics components, understand their role in the experiment, characterise the component, in certain cases, and setup and perform the experiment. Scientific documentation of each experiment and the findings with an oral presentation and viva is required.

PHY410 - General Relativity, Black holes & Cosmology Credits: 3

The course will cover the Einstein theory of gravity, or General Relativity, and the basics of black hole physics and cosmology. The course will include an introduction to tensors and differential geometry, curved spacetime, Einstein equations, the Schwarzschild solution for a star and black hole, gravitational collapse, gravitational waves and topics in cosmology.

PHY431 - Atmospheric Physics Credits: 3

PHY435 - Introduction to Plasma Physics Credits: 3

This course covers the fundamentals about the plasma physics, which includes logical framework of Plasma physics, quasi-neutrality, Debye shielding, collision process, plasma transport phenomena, sheath theory, motion of single Plasma particle, adiabatic and nonadiabatic motion, elementary plasma waves, cold Plasma wave in a magnetized Plasma.

PHY635 - Introduction to Plasma Physics Credits: 3

This course covers the fundamentals about the plasma physics, which includes logical framework of Plasma physics, quasi-neutrality, Debye shielding, collision process, plasma transport phenomena, sheath theory, motion of single Plasma particle, adiabatic and nonadiabatic motion, elementary plasma waves, cold Plasma wave in a magnetized Plasma.

PHY701 - Mathematical Methods for Physics Credits: 3

This course introduces students to advanced mathematical methods used to solve problems in Physics. It covers various topics including tensor analysis, complex variables and integration, special functions, integral transforms, Green's function and group theory.

PHY731 - Atmospheric Physics Credits: 3

This is an elective course for PhD programme in Physics. The course aims at introducing the Earth Atmosphere and its various components, their role in the Earth-Atmosphere system, and vertical profiles. Further, the course covers the concept of atmospheric boundary layer, its evolution and dynamics. Various types of atmospheric circulations and their underlying physics is discussed. Connecting the atmospheric covers aspects of Earth-Atmosphere system and its radiation budget.

PHY733 - Laser Matter Interaction Credits: 3

This course is divided into two parts. The first part of the course deals with the fundamental concepts required to understand laser functioning and characterisation of various laser systems. The second half of the course focuses on laser fieldatom interactions. The course covers timedependent perturbation theory, single-electron atom interaction with an electromagnetic field, and the density matrix formalism. Additionally, applications of light-atom interaction in atomic clocks and atomic magnetometry will also be discussed.

PHY734 - Nonlinear Optics Credits: 3

PHY797 - Research Project Credits: 3

PHY798 - Research Project – II Credits: 3

PSY401 - Psychological Assessment and Testing Credits: 3

The Psychological Assessment and Testing course teaches you to understand why and when to use psychological assessment, and develop an understanding of the different types of assessment available. This course will help students explore the use of psychological testing -a tool that provides valuable information about perceptions, thoughts, feelings, and cognitive functioning such as learning and memory. The course teaches differences among different types of assessments, how to develop such assessments, how to validate it and get authentic information through these assessments. Students will learn to determine when to use certain types of psychological assessments, their pros and cons, and test reliability and validity. This course will provide insight into what can be tested, appropriate use of psychological tests, and how these types of tests are constructed. Helps understanding the advantages and disadvantages of psychological testing. You will also learn about ethical factors that constrain clinical assessment. how behavioural assessment can be conducted, and understand the difference between a structured and unstructured interview in psychological assessments. On completion of this course, you will have a foundation knowledge of how and why psychological assessment is performed.

PSY101 - Introduction to Psychology Credits: 3

The purpose of this course is to introduce students to the fundamental principles of the field of Psychology and provide insights into the inner working of human behavior and mental processes. The course will start with the introduction of psychology as an empirical science and then it will move through the introduction of five main pillars of psychology; biological, cognitive, developmental, social/personality, and mental/physical health. Throughout the course, relevance and applicability of psychology in everyday life will be discussed.

PSY161 - Personality and Individual Differences Credits: 3

This course provides an overview and introduction to the broad field of personality psychology.

PSY210 - Cognitive Psychology Credits: 3

Cognitive Psychology is a core course for BA Psychology major students, largely targeted for the second year BA Psychology students. Cognitive Psychology is the scientific study of how humans store and process information in the mind/brain. This course will provide an understanding of various mental processes involved in the generation of thought and behavior, such as cognitive mechanisms of attention, perception, memory, decision making, thinking, problem-solving, and emotion. Though the primary objective of this course is to introduce the scientific study of mind, the course will also cover various experimental methods and tools that are used to understand human cognition and the emerging trends in cognitive psychology. Throughout the course, relevance and application of cognitive psychology in everyday life will be discussed.

PSY220 - Social Psychology Credits: 3

The course titled 'Social Psychology' is a core course towards a major in Psychology. The students will be introduced to the fundamental concepts, principles and theories in social psychology to then review these in light of the changing times that we live in. The course introduces the idea of social psychologies getting refracted in different social, political and cultural contexts as contrasted to a default universal social psychology. After setting the tone, the course discusses the research methods in social psychology critiquing some key studies as required, while also identifying the advances in social cognition through neuroscience research. The key elements of the study are individual cognition, affect and behavior in the implied and/or actual presence of others, interpersonal behavior- principles and theories therein, esp., focusing on pro-social behavior and aggression and group processes, where the key step level changes that happen in human behavior as a consequence of group affiliation. Throughout the course, applications in different contexts, with an interdisciplinary lens, are introduced and examined in detail.

PSY252 - Health Psychology Credits: 3

Health psychology focuses on how biological, social and psychological factors influence health and illness. This course is designed to give students a broad overview of the field of health psychology. The course is designed to introduce the history, evolution and interdisciplinary nature of health psychology and the mind body connection. It also examines how various socio- cultural differences affect diseases, preventive and health promotive behaviour. The course will help students understand why individuals are healthy, and how do they cope with various illnesses, factors which affect disease progression and recovery, wellness and illness. The course focuses on the role of stress in illness; how the endocrine system and the other systems respond to alleviated stress level, role of certain lifestyle factors, such as smoking or weight control; and specific chronic illnesses, such as cancer and heart disease.The course aims to impart basic skills to handle stress, weight, or pain management, smoking cessation, and risky sexual or health related behaviors.

PSY280 - Abnormal Psychology Credits: 3

This course is intended to provide students an overview of the field of Clinical Psychology and will cover the basics of psycho-pathology, psycho-diagnostics and psycho-therapeutics. The course goes into details regarding the history of the science, as well as contemporary domains of Clinical Psychology such as Forensic Psychology and Neuro Psychology. Students will also be introduced to the wide spectrum of various psychological disorders with origins in childhood (ADHD, Autism) to the disorders commonly found in the geriatric population such as Dementia. The students will be briefed regarding the various assessment and psychotherapeutic strategies used by clinical psychologists in their daily practice. By the end of the course, students will have a basic understanding of the range of psychological disorders, assessment and psychotherapeutic services that clinical psychologists provide to clients.

PSY310 - Lab in Psychology Credits: 3

The course trains students to perform laboratory-

based experiments to study human behaviour. The course deals with experimental techniques required to study perceptual, cognitive and social psychological processes. The emphasis is on providing students with hands-on experience in conceiving, designing, executing and interpreting psychological experiments. The course aims to help students to apply their conceptual knowledge in psychological processes into creating novel experiments. The course offers hands-on training in experimentation on human participants. The principles and paradigmatic theoretical fundamentals associated with each experimental technique are also discussed during the session. The course focuses on five psychological processes, and students will learn to replicate recent experiments that probe these processes.

PSY325 - Thinking and Reasoning Credits: 3

Thinking and Reasoning is an elective course for BA Psychology majors and is mainly (but not exclusively) aimed at BA Psychology students. Also, any student who is interested in the psychology of thinking and reasoning (and fulfilled the prerequisite of Introduction to Psychology) can opt for this course. The capacities of thinking and reasoning set humans apart from all other living beings. Because of these capacities humans can imagine and make inferences not just about the perceived entities and events but also about the non-existent constructs. This course discusses the nature of the fundamental psychological processes behind human intellectual feats such as conceptual representation, imagination, moral reasoning, religious thinking, rational analysis, scientific thinking, etc. However, it should be clarified that this course is distinct from other courses like critical thinking and logical reasoning; Critical

thinking and logical reasoning courses are concerned with "how ought one reason well" -i.e., they have the normative concern- while this course is mainly concerned with "how do humans actually think and reason" -i.e., it focuses on the descriptive concern- and thus discusses the psychological dynamics of thinking and reasoning along with the cognitive biases and errors that humans exhibit. Though the primary objective of this course is to introduce the psychological processes involved in thinking and reasoning, the course will also cover various theoretical assumptions as well as the empirical findings pertaining to thinking and reasoning. Although this course mainly has a descriptive concern, the relevance and the practical applications of the theories and findings of the psychology of thinking and reasoning (as well as the remedies for the errors and biases in thinking and reasoning) will be discussed throughout the course.

PSY350 - Counselling Psychology Credits: 3

Counselling psychology is offered as a major elective course for students who intend to major in Psychology. It is designed to provide the student with an overview of counseling psychology as a profession. The course primarily focuses on orienting the student towards the fundamental skills, theoretical approaches to counseling and its applications across various settings. The course also intends to foster the understanding of the significance of personal awareness in the effective and ethical application of counseling skills. This course explores the basics of counselling, counselling process, and the different method and techniques in classical and contemporary therapies. We will examine the major schools of therapies: Psychoanalytic,

Humanistic, Behavioural, Cognitive and Eclectic therapies with the aim of developing a sound theoretical background in psychotherapies. Along with discussing the various theories of psychotherapy, this course offers an understanding in application of counseling skills across different fields like family and couple counseling, and career counseling, etc. The intensive focus of course will be on the development of individual counseling skills through readings, group discussions, reviews of videotaped interviews and other experiential exercises.

PVA 171 - Theatre and Society Credits: 3

Theatre has evolved through time as an important tool of expression and communication. It is not only a source of entertainment but can serve as a catalyst for social reform or development. Theatre also expands our connection to the larger world around us, and our empathy for lives lived differently from our own. A director or an actor thinks from the perspective of the diverse characters they portray, improving tolerance towards others in the society. The audience, in turn, becomes witness to worlds that they might otherwise not encounter or be familiar with. Studies have also shown that students who participate in theatre perform better in academics as it enhances their power to express themselves. This course aims to introduce students to the different forms and functions of theatre, inclusive of the wide range of roles theatre practitioners can take on, such as directing, acting and scriptwriting. We will also simultaneously discuss how theatre relates to societal concerns, using theatre games to help students to find present day issues that are relevant to them. Importantly, we will work together on producing

skits and script writing in peer groups to encourage students to work cohesively in groups, overcome their inhibitions and find the confidence to engage in creative self-expression. This course is at beginner level & doesn't require prior theatre experience. It is open to all students at the University. It will run for one session a week (for 3 hours) as in a lab course. It is offered by Kabir Thakore, the Director of the Scrapyard Theatre in Ahmedabad.

PVA101 - Exploring Studio Art Credits: 3

This course will enquire into the mediums that are considered studio art. They include drawing, painting, sculpture, photography and printmaking. These mediums will be an entry point to think about spaces and sites beyond the studio per se and will foreground this complex interplay between practice and space, in conjunction with social realities. Students will do hands-on projects that will form an introduction to specific studio art practices, intermediality, and their histories.

PVA112 – Drawing Credits: 3

This course will focus on the fundamentals of drawing while emphasising its role in the act of mark-making as a primal instinct of human beings. While drawing is often seen as a primary tool supporting creative research within art practice, this course will also consider drawing as an independent and intimate approach that offers a keen insight to both the creative process and one's emotional state. To that end, it is a studiopractice course aided by strong contextual studies that will enable students to develop basic rendering skills, understand drawing as a form of action and gesture that is an affirmation of life. Students will be able to objectively perceive the world we live in, which forms the crux of artmaking in any art form – including printmaking, photography, painting, and digital art. The studio sessions will be spent making drawings using representational, abstract, and nonrepresentational approaches. There will be ongoing guidance and critique of works-inprogress, and discussions of finished works, which will touch upon concepts crucial to the creative process, including emphasis on hand-eye coordination, critical thinking, and spontaneity. This will also be supplemented with museum and gallery visits in the Ahmedabad city. Sketchbooks will be an important component in this course; students will explore self-expression and alternative drawing methods as a part of their required initiative. Students will complete this course with a strong understanding of what constitutes as drawing, and also develop technical skill and competency in the drawing process. The goal of this course is to perceive action and gesture as means to create art while also laying a strong foundation for anyone who wants to pursue other forms of art.

PVA126 - Scenic Design for Theatre Credits: 3

PVA127 - Street Theatre: Raise the Voice Credits: 3

PVA130 - Fundamentals of Photography Credits: 3

RES101 - Introduction to Research Methodology Credits: 3

This course introduces students to one of the ways in which we acquire knowledge about the world-

Doing Research. Research is an attempt to understand the world through systematic study that is, through identification of a problem, question, or hypothesis; selection of methods to investigate the question, collecting data, interpreting data, and reporting findings. The process of designing and doing research is a mix of various elements including the world view and social location of the researcher (researcher positionality), the selection of what one wants to investigate (research problem/question), and how one goes about doing it (research methods). This introductory and project-based course will familiarize students with the philosophical underpinnings of research, and enable them to identify, compare and contrast different qualitative and quantitative research methods suitable for answering a question, apply their understanding to design a research project in small groups, collect and analyse data, and demonstrate basics of academic writing.

SAN101 - Learning Sanskrit Through Sanskrit Literature: Elementary Credits: 3

This course is the first of a set of two courses where students will learn scholastic Sanskrit through exercises drawn from various Sanskrit literary sources, such as well-known subhāşitas, Pañcatantra, Vālmīki Rāmāyaṇa, etc. In this course, students will be introduced gradually to various aspects of Sanskrit morphology and syntax so as to enable them to read simple Sanskrit sentences and verses. Exercises (sentences, verses and passages) for each class will be drawn from original Sanskrit works (brief description below), and will be chosen so as to exemplify the key grammatical features which need to be explained. The Pañcatantra is a famous collection of Sanskrit stories, in verse and prose, dated to around the

second/third century CE and is considered a nītiśāstra (a treatise on government or political science). The Vālmīki Rāmāyana is one of the two famous Indian epics, a mammoth work comprising nearly 24,000 verses and which is of monumental importance and legacy. Each class will be divided into three segments: a revision of the past lesson(s) (and review of assigned afterclass exercises), the scheduled lesson, and in-class exercises taken from Sanskrit literature. There will also be surprise tests to further reinforce the learning of various grammatical features. This course will prepare students to take the second of this set of courses (SAN102), wherein students will study more advanced syntactical aspects of the language. These two courses will prepare students with the adequate training in Sanskrit grammar to begin their study of original Sanskrit works in their second year of Sanskrit study (SAN201 and SAN202). Knowledge of the Devanāgarī script is not a prerequisite for this course. This is a core course for the Minor in Sanskrit Studies.

SAN201 - Reading Sanskrit Scholastic Texts: Elementary Credits: 3

This course is the first of a set of two courses (other being SAN202) which initiates students into the discipline of reading original Sanskrit texts. Students have been introduced to the intricacies of Sanskrit morphology and syntax in SAN101 and SAN102, and will now begin their journey into classical Sanskrit poetry and prose. We will read one/two famous episodes from any of the three vastly influential texts -Mahābhārata, Pañcatantra and Vālmīki Rāmāyaņa. Students will also be introduced to Sanskrit commentaries and their role in textual interpretation. We will also consider some English

translations of these works and compare them to the original Sanskrit text, understanding thereby the inevitable gap in any work of translation (and the intellectual joy therefore in being able to read the original!).

SPS 303 - Locating Globalization Credits: 3

We wear global brands, consume global media, enjoy world cuisine, and use westernised slang. We wish to study, work or settle 'abroad'. Simultaneously, we remain passionately attached to national identities, personal communities and local products, practices and norms. Such contradictions are now a part of our everyday lives but are undergirded by complex historical processes of movement and flow- of production processes, labour, capital, technology and ideas. This course aims to 'locate' globalization, not by treating global and local as binaries, but by studying different approaches, understandings and critiques of what remains a slippery process and concept. Rather than treating globalization as an analytically isolable object, process or phenomenon, we try to understand how it is embedded in production, value, consumption, desire and politics. Thus, the course will cover broad themes including economic globalization, cultural globalization, political, technological and ecological globalization. The course will engage with abstract theories of globalization and also its concrete manifestations in different parts of the world. Finally, the course, will complicate salutary narratives of globalization by looking at questions of rising income inequality, cultural nationalisms and ecological crisis. Course material will comprise mainly book chapters and academic journal articles, complemented by commentaries in reputed global journals and videos and film where relevant.

SPS102 - Identity, Inequality and Difference Credits: 3

The course invites students to critically examine 1) the ways in which we present ourselves to social audiences and are ascribed identities around gender & sexuality, class, caste, and tribe/ethnicity 2) how differences in social identification become expectations of appropriate behavior and how these codes of conduct are perceived, negotiated, subverted and mobilized in diverse contexts and 3) hierarchies that cohere around difference. The course will largely focus on contemporary forms of social identification but present them as historically and culturally situated, and mediated by global flows. In particular, we will consider the contradictory effects of new technologies and markets for contemporary forms of social identification and inequality, and the utility of difference for accruing cultural capital in a market economy. Course content is drawn from a range of academic fields of inquiry including anthropology, sociology, literature and cultural studies.

SPS202 - Family, Community, Nation Credits: 3

In this course, we will critically examine entities such as family, caste, class, community, language and nation, and ask how they generate powerful and sometimes conflicting loyalties among individuals. Are such associations natural and primordial, or contingent and historical? Do they have an economic rationale? How do the actions of state, law, and civil society mediate these attachments? Over the course of 5 units - Family, Caste, Religion, Language, and Nation - this course we will address specific questions such as: What is the history of the family as a unit? How

did ideas such as the father as the head of the family, or the heterosexual couple as its anchors, come to be taken for granted? What is the social significance of marriage and how do we critically examine its current glossy, romanticized reinventions as elaborately staged spectacles? What is the significance of caste in our lives, and what is its place in Indian society? How does the Indian Constitution view caste? What is the relationship of religion to the state? Should it be private and contained within families, or spill over into streets and processions? Why have religious minorities, Dalits, and other groups at the 'margin' consistently challenged the idea of This course builds on the nationalism? understanding of the production of social identities in the introductory courses of the Social and Political Sciences programme and aims to develop a stronger theoretical foundation for analyzing key social categories. In this course, students will engage with a selection of texts focusing on categorizations along the lines of gender, family, caste, religion, language, and nation. Students will learn to critically examine these categories, their inter-connections, and the processes through which they are reproduced in evervdav life.

SPS255 - Introduction to Comparative Politics Credits: 3

This course will serve as a major elective for the Social and Political Sciences (SPS) major and as a free elective or General Education Requirements (GER) for students from across the university. The purpose of this course is twofold: First, for you to master a certain set of conceptual tools and basic knowledge about comparative politics. Second, for you to formulate your own arguments about issues related to comparative politics, making use of these analytical tools and knowledge to develop and present your ideas. Hence, analytical thinking including creative and critical thinking is the most important ability which will be fully developed throughout this course. Yet, no prior knowledge on the subject is assumed nor required. The purpose of this class is to foster you to become a politically literate fledged graduate by highlighting diverse philosophic foundations of comparative politics and introducing broad and alternative methods of inquiring the study of comparative politics. Comprehension and willingness to learn basic political science approaches are needed.

SPS300 - Qualitative Research Methods Credits: 3

What research methods do social scientists use to understand phenomena such as human experiences, processes, events, relations and networks? What does 'fieldwork' entail, and how do researchers define and construct a field? How do social scientists establish the validity, rigour and verifiability of their research questions and hypothesis, while remaining open to the inherently unstable nature of social relations? This course introduces students to research methods in the social sciences through a combination of reading, discussion and fieldwork practice. Alongside tracing some of the key debates that have arisen in qualitative social science methodology, students will learn about new and evolving modes of virtual qualitative field work such as navigating digital and remote sites of research students and the ethics and power dynamics implicit in conducting qualitative research. Each week students will learn about the practical skills as well as the theoretical aspects of conducting social science research. Through a series of practical writing assignments, in-class workshops and peer projects, students will learn key research skills- formulating a research question, identifying an empirical research site, sourcing informants, rapport building, conducting interviews and practicing field note techniques. The teaching of research methods will proceed through a close reading of select texts, each of which highlight the possibilities and limits of particular methods- such as interviews, case studies, participant observation, etc. The last third of the course will be devoted to a short on-campus research project in groups or pairs where students will test the methods and approaches they have studied. The course is envisaged as a stepping stone to help students embarking on their undergraduate thesis projects. The course is also designed as a methods course for graduate students in the interdisciplinary humanities and social sciences. For graduate students, the course will proceed as a reading course which enables them to start thinking critically about key debates in the social sciences, and the methods best suited to their own topic of study.

SPS351 - Studying migration: Cultural politics of human mobility Credits: 3

Migration is typically defined as a change in residence across administrative borders. What prompts people to leave home, whatever their attachments and grievances with "home" may be? How do they leave, where do they go and how do they make new homes in new places? Keeping in mind that capability to move differs, how does gender, class, caste, region, religion, and so on affect migration? How is the sociocultural and economic organisation of the origin and destination region refashioned through migration? These are some of the questions the course will ask students to engage with. Since migration involves mobility between different systems of

values, cultural politics is integral to migration. Cultural politics refers to struggles and contestations over social, economic and political values and meanings. For instance, gender norms vary between Saurashtra and Toronto and migrants have to work out ways of doing gender across the differences. The course uses cultural politics as a framing device to study migration. The course design has two organising principles-one, census- based reasons for migration are used to structure the modules, and two, each module pays attention to diversity. The three reasons for migration that the census notes as prominent are marriage, work and education. The course has a module on each. Secondly, within each module, internal and international migration, gender (masculinity and femininity), and class (low- income and affluent) are covered. We will also consider how covid-19 lockdowns affected migration. Students will be encouraged to engage with sub-areas and themes not covered in the course content, like forced migration (refugees), the education of children of migrant households, and the impact of climate change on migration etc in their literature review and/or project. The instructor will provide additional materials based on student interest.

SPS353 - Political Psychology Credits: 3

Political psychology is an interdisciplinary field that integrates theory and research from various domains, including biopsychology, neuroscience, evolutionary psychology, social psychology, developmental psychology, and cognitive psychology. This course applies social science principles to the study of politics, aiming to understand how the cognitive and emotional processes of national leaders and citizens shape their decision-making and its outcomes. By examining the strengths and limitations of political psychology research, this course explores the intersection of individual decision-makers' lived experiences with abstract disciplinary theories and categories. Throughout practiceintensive seminars, we delve into the field of political psychology and explore quantitative methods that contribute to nuanced understandings of politics, power, and dynamics. The readings encompass exemplary works in political psychology and discussions on quantitative methods and methodologies within the social sciences. Students in this course will have the opportunity to redesign their own political psychology research projects, focusing on their primary areas of interest. Additionally, they will be expected to dedicate a significant amount of time each week to practicing R programming.

SPS354 - Caste and the Contemporary Credits: 3

This course introduces students to caste as an analytical category in studying social and cultural processes. Making use of ethnographies, letters, memoirs, and autobiographies, students will engage writings on caste both as subject and method. What does it mean to write about caste in the contemporary? How do they inform one another? Rather than demonstrate a customary prevalence of caste in the present-day, the course explores the contours of contemporary theory the lens of caste. The experiential alongside anthropological modes of understanding serve as interrogative strands throughout the course. When it is not reduced to a singular concept around time, the contemporary becomes a unique vantage point to critically locate how we have come to inhabit the social and the ethical. Further, the course is designed to bring in global perspectives around

caste and does not limit it to an isolated regional phenomenon. The course is valuable to students who are interested in questions around social hierarchy, ethics, and experience.

SPS400 - Thesis/Capstone Project Proposal Course Credits: 3

This course is designed to help students research and write their BA thesis or capstone project in the Social and Political Sciences. The class will enable them to adopt a structured approach to working on their thesis by setting concrete deadlines with well-defined tasks for each week. This includes approaching and finalising a faculty advisor in the first month of the course, who will guide them towards relevant literature. approaches and methodology. The course will facilitate them to reflect on their writing both in terms of its style and content. We will draw on texts that explain the skill-sets needed to enhance the practice of research and writing. The course will also help students develop as a collegial academic, able to engage with the works of their colleagues, provide constructive criticism and judiciously incorporate feedback from others into their work. By the end of the course they will have a proposal of a thesis or capstone project, with first drafts of each component of a thesis or a project, that they will continue to polish over the rest of the academic year.

SPS497 - Independent Project: A Gender Inclusive Approach to Menstruation and its Influence on the Notion of 'Femininity' and Gender Relations Credits: 3

SPS700 - Research Methods in the Social Sciences

Credits: 3

SPS754 - Caste and Contemporary Credits: 3

This is a graduate level course. The course introduces students to caste as an analytical category in studying social and cultural processes. Making use of ethnographies, letters, memoirs, and autobiographies, students will engage writings on caste both as subject and method. What does it mean to write about caste in the contemporary? How do they inform one another? Rather than demonstrate a customary prevalence of caste in the present-day, the course explores the contours of caste and contemporary theories. The experiential alongside anthropological modes of understanding serve as interrogative strands throughout the course. When it is not reduced to a singular concept around linear time, the contemporary is no longer a singular event. How does one locate the ways in which we come to inhabit the social and the ethical in these moments of flux? Further, the course is designed to bring in global perspectives around caste and does not limit it to an isolated regional phenomenon. The course is valuable to students who are interested in questions around social hierarchy, ethics, and experience. Graduate students will take up a project that connects to their larger thesis and work towards understanding how inequality is part of the contemporary in the most intricate of ways.

STA355 - Stochastic Processes Credits: 3

Many physical processes that we observe in real life, such as customers arriving at a restaurant, the price of various financial instruments over time, or the growth of bacteria over time, can be modeled and analyzed using tools developed in this course. This course deals with sophisticated simulation techniques such as Markov Chain Monte Carlo (MCMC) for drawing samples in complex scenarios. We use R programming to show illustrative examples. This course is useful for both Data Science and Bio-Computing specializations.

School of Engineering and Applied Science

CHE211 - Material and Energy Balance Credits: 3

This course is an introduction to the principles and techniques used in the field of chemical engineering. Specifically, the course will discuss methods to systematically formulate and solve material and energy balances for a wide range of processes used in the chemical industry.

CHE212 - Mechanical Operations Credits: 2

Mechanical Operation course concentrates on state-of- the-art technology used particulate Technology parts such as particle analysis, size reduction & size separation. The course will also cover the solid liquid and solid gas separation, agitation & Mixing and concentration of solid liquid slurry by Evaporation.

CHE300 - Mass Transfer Operations – II Credits: 3

In this course, applications of mass transfer will be discussed. This will include distillation, liquidliquid extraction, solid-liquid extraction and adsorption.

CHE311 - Chemical Reaction Engineering-I Credits: 2

This course will cover the principles involved in the selection and design of chemical reactors for homogeneous reactions.

CHE312 - Experiments in Fluid Flow and Heat Transfer Credits: 1.5

The experiments are designed to verify the principles of two courses Fluid Mechanics and Heat transfer and provide hands on practice on proto type equipment

CHE402 - Chemical Process Simulation Credits: 2

CHE440 - Process Design and Economics Credits: 2

In many cases the processing costs associated with the various process alternatives differ by an order of magnitude or more, so that we can use shortcut calculations to screen the alternatives. However, we must be certain that we are in the neighborhood of the optimum design condition for each alternatives, to prevent discarding an alternative because of a poor choice of design variable. This course brings together the concepts of engineering and economics for chemical plant design and optimization. This course can be termed as the pinnacle of the chemical engineering curriculum as it coves Mechanical Design of chemical Process Equipment followed by Plant design covering Front End engineering, Preliminary and detailed Engineering including costing- equipment cost, fixed capital Investment and working capital.

CHE503 - Pollution Control Credits: 3

Introduction: Environment and environmental pollution Air Pollution Control: Air pollution system, Air pollutants, Need of APC, Air pollution by chemical process industry, Standards as per APC Acts and Rules, APC equipmentparticulate and gaseous emissions Water Pollution Control: Constituents in wastewater. Need of WPC, Water pollution by chemical process industry, Standards as per WPC Acts and Rules, WP treatment processes and equipment Solids Waste Treatment and Disposal: Characteristics and sources of industrial wastes, Need of hazardous waste treatment and disposal, Industrial hazardous waste-related Rules, Industrial hazardous waste treatment and disposal methods Pollution Prevention: Waste audit, Reuse, recycle, recover, Cleaner production in chemical process industry, Wealth from waste, Good housekeeping, Maintenance

CHE504 - Catalysis and Catalytic Processes Credits: 3

Study of catalysts and catalytic process is highly interdisciplinary in nature combining the concepts and applications from domains such as Chemistry, Chemical Engineering and Material Science. This course covers the fundamentals of catalysis and has been designed to cater the need of students coming from these diverse areas. This course includes basic modes of catalytic action, classification and key concepts, Industrial applications of catalysts, desired characteristics, synthesis and characterization techniques as well as kinetics of catalytic reactions. Course Content includes: 1. Classification and introduction to catalysis2. Surface chemistry3. Materials perspective4. Analytical aspects5. Reactivity and Kinetics of catalytic reactions6. Mechanistic aspects7. Hands on laboratory based experiments on catalysis

CHE574 - Special Topic: Instrumental Methods of Analysis Credits: 3

CHY100 – Chemistry Credits: 3

This introductory chemistry course covers fundamentals of inorganic and physical chemistry. It focuses primarily on important inorganic concepts like transition elements, coordination chemistry, acids and bases. It also gives an insight to physical concepts like chemical kinetics, equilibrium, electrochemistry and solution chemistry. Along with this, the course gives an overview and hands-on experience to important instrumental techniques used in inorganic and physical chemistry. This course makes the basis for some of the specialized topics of chemical engineering curriculum.

CHY101 - Organic Chemistry Credits: 3

This course is designed to provide a fundamental overview of organic chemistry to students interested in pursuing a career in the sciences. Upon successful completion of this class, students will understand the relationship between structure and function of molecules, the major classes of reactions, reaction energetics and mechanisms, synthesis of organic compounds, and how to determine structure via various spectroscopic techniques. There will be two lectures per week.

CSC201 - Computer Organisation

Credits: 3

Overview of Digital Sequential Circuits and its Implementation Review of digital logic circuits: Sequential circuits (counters and registers) and Moore Finite State Machines (FSM): Various methods of implementation of FSM:Implementation based on Decoders and OR gates, implementation based on two-level Multiplexers, implementation based on ROM. Introduction to Computer Organization Basic structure of micro-computer / Central Processing Unit (CPU); Concept of control bus, address bus and data bus. Concept of Instruction Set Architecture. Understanding the building blocks of micro-computer: Data memory, Instruction Memory, Register Set, Address decoding, Arithmetic-logic Unit (ALU), Program Counter (PC), Stack Memory and stack pointers, I/O registers, control unit, etc. Design of control unit: Hardwired Control (MUX based and FSM based), Microprogrammed Control (ROM based). Instruction set architecture and assembly language programming RISC and CISC Architectures; Harvard and von Neumann Architectures: Instruction format: Addressing Instruction Set for an example Modes: microprocessor (8085/AVR/MIPS/etc.) covering these category of instructions: Data Transfer; Arithmetic; Logical; Branching; Subroutine; Stack; Basic I/O and Interrupt; Assembly language programming. Basics of Memory Organization and Pipelining Introduction to memory hierarchies and organization; Cache; Introduction to Pipelining: Arithmetic Pipeline; Instruction Pipeline;

CSD100 - Introduction to Data Science Credits: 3

Data science is an interdisciplinary area that

involves recording, storing and analyzing data to gain insights and knowledge for decision making. This introductory course provides a foundation in data science for first year undergraduate students. The course covers data science process and its life cycle, data collection using sampling/surveys, ordering/organizing, data processing and visualization of data through charts and maps. Statistical fundamentals needed for analysis and interpretation of data are covered along with cases and examples related to real life applications of data science.

CSD101 - Fundamentals of Data Science Credits: 3

Data science is an interdisciplinary area that involves recording, storing and analyzing data to gain insights and knowledge for decision making. This is an intermediate level course providing foundation in data science and programming for first year undergraduate students. The course covers data science process and its life cycle, data collection using sampling/surveys, ordering/organizing, statistical analysis and visualization of data. Cases, examples and practical applications of data science are discussed using spreadsheet and python programming.

CSD102 - Data Science Credits: 3

This course will introduce data science that will be useful in data analytics and visualization. Students will learn basics of statistics that they will apply for data collection, data cleaning, data modeling, data analysis and data visualization using the tools MS Excel, Tableau, Pick to chart and QGIS. Students will be introduced to the Python programming for data science. Data science is an interdisciplinary area that involves recording, storing and analyzing data to gain insights and knowledge for decision making. This course is offered to first year students that emphasis on python programming and statistics. The course covers data science life cycle, data collection using sampling/surveys, organizing, processing and visualization of data using maps, charts and infographics. Descriptive statistics, probabilistic approaches, cases and practical applications of data science are discussed using spreadsheet modeling and python programming.

CSE100 - Fundamentals of Computer Programming Credits: 3

The course is aimed to give exposure to programming paradigms and to develop the problem solving ability. The course would introduce the concepts of computer programming. Following topics would be covered during the course: Problem solving using Algorithms and Flowcharts: Programming paradigms; Foundations of Python and C programming; Visual programming; Operators; Control statements; Input/output operations; Decision making and branching; Type conversions; Collections; Functions; String; File management; Exception handling.

CSE205 - Data Structures Credits: 4

The course covers basic data structures and techniques for design and analysis of data structures with a rich set of applications in research and industry. The course provides a thorough introduction to the analysis of the complexity of algorithms. It shows how to use these analysis for algorithms using the basic data structures like Lists, Stacks, Queues, Binary Search Trees, Heaps and Balanced Search Trees for storing data, sorting and searching problems. We will also introduce tools and techniques for computational analysis of these basic data structures. It covers also some more advanced problems graph and tree algorithms.

CSE300 - Software Engineering Credits: 3

CSE332 - Operating Systems Credits: 4

CSE340 - Operating Systems Credits: 3

It is a foundation course in Computer Science to introduce basic concepts and internals of modern operating systems.

CSE511 - Algorithms and Optimisation for Big Data Credits: 3

In the digital era, the size and availability of data have ever been growing massively. Big Data comes with immense opportunity, but turning this seriously high volume, high velocity, structured or unstructured, heterogeneous, often noisy and high-dimensional data into something one can use is a huge challenge. This motivates increased interest in the design and analysis of algorithms for rigorous analysis of such data. In this course, we will consider algorithms for scenarios when the size of the data is too large to fit into the main memory of a single machine. Two main paradigms of computation that we will focus on are massively parallel computation and streaming algorithms. The course will focus mainly on four aspects: Module A. Streaming algorithms: Data

streams represent a large dataset as an arriving online sequence of updates to its entries. The goal of algorithm design is to minimize the number of passes and space while achieving the best possible approximation guarantee. Module B. Convex optimization and compressed sensing: The key focus of this module would be to understand the basics of optimization through the notion of Gradient descent. Furthermore, the concept of compressed sensing involving the operations on a huge sparse matrix will be covered. Module C. Massively parallel algorithms: In massively parallel computational systems (clusters) the data is partitioned between a large number of identical machines connected via a high-speed network. The goal of algorithm design in such a case is to minimize the number of synchronous rounds while optimizing the time/space, communication, approximation, etc. Module D. Sublinear time algorithms: In this part, we will focus on algorithms, which have access to the entire dataset. However, the size of the data is prohibitively large so that we can only make a small number of carefully chosen queries to it. The goal of such algorithm design is to approximate interesting parameters of the dataset and study its properties while minimizing the number of queries and running time.

CSE516 - Probabilistic Graphical Models Credits: 3

Probability theory and Graph modelling (PGM) play a key role in the design of a system across many disciplines like Artificial Intelligence, statistics, Life Sciences -computational biology, Computer Systems, Intelligent Transports, Robotics, Economics etc. Such field treated as "the search for a coherent global conclusion from local information". The PGM framework provides a unified view for this wide range of problems, enabling efficient inference, decision-making and learning in problems with a very large number of attributes and huge datasets. PGMs bring together graph theory and probability theory and provide a flexible framework for modelling large collections of random variables with complex interactions. The course will focus mainly on three aspects: A. The core representation, including Bayesian and Markov networks, and dynamic Bayesian networks; B. Probabilistic inference algorithms, both exact and approximate; and C. Learning methods for both the parameters and the structure of graphical models. Students entering the class should have a pre-existing working knowledge of probability, statistics, and algorithms. This class will set the foundation for predictive machine learning, analytics. reinforcement learning, natural language processing etc. Students can apply PGM in any field of core computer science and engineering to handle multidimensional uncertain problems.

CSE518 - Artificial Intelligence Credits: 3

Artificial intelligence (AI) is bound to impact human life in a big way. The syllabus is State spaces, Search (uninformed, informed, local), Games and adversarial search, Logical inference, Constraint satisfaction problems, Bayesian networks, Markov chains, Hidden Markov models, Forward and Viterbi algorithms, Markov decision processes, Machine learning, Neural networks, Reinforcement learning, Deep learning and AI for Robotics.

CSE525 - Theory of Computing Credits: 3

This course gives an introduction to theory of automata, formal languages and computational

complexity. In particular, the content includes deterministic and non-deterministic finite automata, pushdown automata, Turing machines, decidable and undecidable computation problems. Topics will include some aspects of computational complexity. Polynomial (P) and non-deterministic polynomial (NP) complexity class of algorithms.

CSE526 - Advanced Computer Arithmetic: Algorithms and Sub-systems Credits: 3

This is an elective for the BTech CSE/ICT program (can be taken by BS in CS students, if they have the pre-requisite), and an elective for the MTech CSE program. This course would cover the following (tentative) topics: Review of Digital Sequential Circuits: •Finite State Machines (FSM), • Review of RTL/pipelined systems Arithmetic-Logic and Datapath Subsystems (Logic Structures / Algorithms, and •Arbiter (FSM) Implementations): with predefined priority order, arbiter with request order •Pseudo-Random number generator based on Linear Feedback Shift-Registers (LFSR), modular and standard LFSR •Error Correcting Codes: LFSR based CRC, and Hamming7-4 and 12-8 codes• Insertion Sort digital implementation Digital Logic/Structures for Adders: •Bit-serial adder •Ripple-carry adder• Carry-skip or bypass adder, multi-level skipping •Carry-select adder (multi-level) •Conditional-sum adder •Carry lookahead adder (based on propagate and generate signals), multi-level look-ahead blocks •Prefixtree adders: Radix-2 and radix-4 Brent-Kung adder, Kogge-Stone adder, Sklansky adder, Arbitrarily drawn prefix-tree structures •Hybrid adders: Carry select adder with look-ahead block, Carry select adder with prefix-tree (Brent-Kung or Kooge-Stone) block (aka "sparse-tree adder")

•Carry-Save Adder (CSA) tree for multi-operand addition: Wallace and Dadda tree adder structures based on FA and HA •Concept of column based counting: 3-to-2 counters, 5-to-3 counters, 10-to-4 counters •Multi-operand (serial) addition using one CSA and one Carry Propagate Adder (CPA) •Signed-number trick (complementing sign-bit and placing -1 in the MSB column) applied to multi-operand additions Digital Logic/Structures for Multipliers •Unsigned Multiplier (serial left-shift or right-shift algorithm) •Unsigned Array Multiplier and its parallelogram/rectangular structure •Radix-2, radix-4 and radix-8 Booth encoding based multiplier (for signed operands) Modified Baugh-Wooley Multiplier (for signed operands) and its parallelogram/rectangular structure •Divide and conquer multipliers (for unsigned operands) •Squaring circuit (single operand multiplier, with reduced partial products) Digital Logic/Structures for Division: Non-restoring method, and restoring method, SRT (Sweeney, Robertson and Tocher) algorithm, Goldschmidt algorithmDigital Logic/Structures for Mathematical functions: • Introduction to Fixed-Point (FXP) number system and related quantization error• CORDIC Algorithm (circular/rectangular/hyperbolic versions with rotational/vectoring modes), for approximation of math functions. Newton-Raphson method (for reciprocal, for division, for reciprocal of sqr root) • Piece-Wise-Linear-Approximation of math functions (based on Look-up table method) NOTE: Many of the above topics would be taught, with the help of relevant Verilog HDL codes and Logisim tool

CSE540 - Cloud Computing Credits: 3

The course will introduce basic concepts of

distributed and parallel computing, serviceoriented architecture, virtualization, service and delivery models of cloud computing. The course will include internals of virtual machines, development and deployment of cloud services. Challenges and research issues like resource provisioning, Virtual Machine scheduling, load balancing, VM migration, privacy and security, energy efficiency in clouds etc. will be introduced. Students will work on group projects to address development or deployment related aspects of cloud services/applications.

CSE543 - MOOC: Mathematics for Machine Learning Specialization Credits: 3

CSE544 - MOOC: Convex Optimization Credits: 3

CSP510 - Advanced Wireless Communication Credits: 3

The future digital system will be integrated with Software Defined Networks and Cyber-Physical System (CPS). These technologies are going to change the future of the wireless industry and personal life of human being. The aforementioned technologies and future xG services will solely depend on the software-defined nodes. Current smartphones have intelligent Software Defined Radios (SDR) which controls the cross-layer communication start from the application layer to the physical layer. Hence, it is important to study the fundamentals of SDN and CPS using SDR platforms. The majority of transceiver industries used SDR as a fundamental component to build and evaluate the performance of algorithms for any future network protocols. With this in mind, the advanced wireless communication course is proposed for the B. Tech-VI-ICT student to learn

to apply different recent tools like Convex Optimization, Machine Learning, Deep Learning , Design and implementation of SDR system for SDN and CPS system. There will be three lab experiments (Imperfect CSI, MIMO-TB, VCPS, SDN-Theory with Simulation) and four months of project (Jan-April) work is planned. The initial laboratory sessions will help students to identify new academic space in comparison with tradition computer science courses in their future studies. It's good to see that in majority foreign university and MNC have started their significant amount of investment in the field of SDN and CPS. Indian Government will be going to invest more than 3500 Cr just for motivating the research in the mentioned fields. The students have to work in group of two students to identify the project definition in the choice of their interest start from the beginning of the semester. The project work will be evaluated by the technical people from the industry. Students will be sponsored to visit the wireless industry based on their project definition to understand the industry specifications and incorporate their requirements into their project. Furthermore, the one of the laboratory experiment is planned to done collaborative work with the foreign university to encode and decode the transmitted data on 5G standard. It actually helps students to improve their teamwork, communication with industry people and foreign university, consistency to solve a real-time problem and technical writing skills.

CSP513 - Special Topic: Applied Deep learning for Wireless Networks Credits: 3 -

CSP514 - Special Topic: IOT application for 5G wireless networks Credits: 3

ECE209 - Digital Design Credits: 4

The course aims to provide an understanding of the fundamentals of designing digital circuits comprising a basic computer system. Students would be introduced to various methods used for designing diverse digital electronic circuits.

ECE210 - Signals and Systems Credits: 3

It is a classical course covering the following broad topics Introduction to signals and systems Convolution and Correlation Continuous time Fourier Series Discrete time Fourier series Continuous time Fourier Transform Discrete time Fourier Transform Discrete Fourier Transform Filters

ECE302 - Embedded Systems Design Credits: 3

This course explores the design of embedded systems using AVR microcontrollers, widely used peripheral devices and C programming. The internal architecture and features (e.g., timers, interrupts and serial communication) of ATmega32 microcontroller will be discussed in detail. The interfacing of ATmega32 with widely used peripherals (e.g., LCD displays, keyboards, DC motors, etc.) using C programming will be performed.

ECE310 - Wireless Communications Credits: 3

ECE502 - VLSI Design Credits: 3

This is an elective for the BTech CSE/ICT

program (can be taken by BS in CS students, if they have the pre-requisite), and an elective for the MTech CSE program. This course will cover: Trends in VLSI industry; MOS Cap; IV characteristics of MOSFET; CMOS inverter and VTC characteristics; CMOS standard and compound gates and transistor sizing; skewed gates, RC delay analysis of CMOS gates; Gate layout and Lambda rules; Logical effort method for delay analysis; power dissipation (dynamic and static power), Pseudo-NMOS gates, passtransistor gates, dynamic logic circuits – domino gates, etc.

ECE504 - Internet of Things Credits: 3

The course "Internet of Things" focuses on connecting sensors, actuators and other electronic devices to internet using two platforms – Arduino Platform and Raspberry Pi platform. The data and information sent to the internet can be collected/stored, analysed and utilized for decision making. All students will build two projects as part of the course. The example of projects may include Home Automation using IoT, Irrigation Management System using IoT, etc. The course is divided into following units. Unit 1: Introduction to Internet of Things: Review of Embedded Systems, IoT Fundamentals, Fundamental Building blocks of IoT Devices, IoT in various domains of life. Unit 2: Introduction to Arduino Platform Unit 3: Actuators: Study of selected actuators, their operating principles, application etc. Unit 4: Sensors: study of fundamental principles of sensors for various parameters like temperature. Their comparisons and use in IoT. Unit 5: Internet and communication protocols Unit 6: Introduction to Raspberry Pi Platform Unit 7: Linux Fundamentals Unit 8: Introduction to

Programming in Python Unit 9: Selected Advanced Topics in Internet of Things

ENR100 - Visualisation Credits: 1.5

Introduction : Relevance of technical drawing in engineering field. Types of lines, Perspective view Orthographic projection of Points and Lines Orthographic projection of Solids: Isometric Projection: Isometric View and Projections Sections of Solids: Introduction to Computer Aided Drawing: Role of CAD in design and development of new products, Advantages of CAD. Creating two dimensional drawing with dimensions using suitable software.

ENR101 - Product Realisation Credits: 1.5

This course aims to impart students with the knowledge of different products and processes. The topics include assembly, carpentry, sheet metal, origami and machining. The students learn design and manufacturing aspects of products and their industrial relevance.

ENR203 - Material Science and Engineering Credits: 2

This course provides the basis for the understanding of structural, mechanical, electrical, optical, and magnetic properties of the Material. It will provide an insight into material science in modern society via studying the advanced materials, understanding the process, and product realization. It helps in understanding how the relationship between materials' structure, processing, and properties influence the product. Laboratory sessions will be devoted to demonstrations and experiments that illustrate the lectures. The course will provide significant insight into the fundamental characteristics of metals, ceramic, nanomaterials, polymers, and nanocomposites. Topics: Introduction to material science and engineering, Atomic structure and bonding in materials, Crystal structure and crystal geometry, Solidification, crystalline imperfection and diffusion in solids, Phase diagrams, engineering alloys, Introduction to ceramic, magnetic materials, polymers, nanomaterials, electronic materials, composite materials.

ENR204 - Mechanics of Rigid Bodies Credits: 2

Evolution of Structural Engineering, Tacoma Narrows Bridge Collapse, Continuum Mechanics and Classification Distinction between statics and dynamics. Idealizations in engineering, Degree of freedom, Rigid Body and deformable body, Force and load, Transmissibility of a Force, Resolution of Forces, Body and Surface Forces, External and internal forces Equilibrium of a particle, Free-Body Diagram, Equilibrium of rigid bodies, Statically indeterminacy Work, Principle of virtual work, Center of gravity of a twodimensional body Rectangular moment of inertia, Polar moment of inertia, Radius of gyration, Parallel-axis theorem Elastic potential energy, Gravitational potential energy, Stability of equilibrium, Equilibrium in terms of potential energy, Condition for equilibrium, Axial, Bending, torsion, shear load, Real-world structures Definition of the beam, Slender members, Forces transmitted in a slender member, Shear and bending moment in beam, Relations among load, shear, and bending moment, Torsion in a shaft Average normal and shear stress, bearing stress, torsional stress, allowable stress, factor of safety, Thermal stress Normal and shear

strain, Poisson's ratio. elastic deformation of axially loaded members

ENR205 - Thermodynamics-1 Credits: 2

This course covers the fundamental principles of thermodynamics and physical chemistry as applied to energy systems. This course provides a foundation in fundamental thermodynamic phenomena, including the first and second laws of thermodynamics, thermodynamic properties and equations of state.

ENR303 - Introduction to Composites Credits: 3

ENR305 - Sensors, Instruments and Experimentation Credits: 2

Teaching scheme : 4 Hours of lab/week : Credits 2 Introduction to construction and characteristics of sensors. Experiments involving application of sensors for physical quantities like temperature, pressure, force, torque, strain, velocity, acceleration, linear and angular speed and displacement, volumetric and mass flow rates, illumination, and sound level etc. Introduction to calibration of sensors and data acquisition systems.

ENR486 - BTech Thesis-1 Credits: 3

ENR503 - Machine Vision, Learning and Applications Credits: 3

This course covers three major topics: 1) Machine Vision, 2) Machine Learning and 3) related

applications. A brief introduction to the first two topics will be provided to the students, while third topic could serve as a connecting bridge between theoretical and practical aspects. Nowadays, Machine learning is a buzz word that has the potential of changing lifestyle of many humans. The course is multidisciplinary and offered university wide so that a student from any engineering branch can enroll. For more details please visit the session plan.

ENR704 - Collaborative Research Project – I Credits: 3

ENR705 - Collaborative Research Project – II Credits: 3

ENR851 - Special Topics in Engineering -Introduction to Patent Drafting and Filing Credits: 3

ENR852 - Special Topics in Engineering -Reinforcement Learning Credits: 3

HRT221 - Conservation and Preservation Science Credits: 3

Topic Name Content 1. Introduction and Conservation Philosophy Historical development, current principles and practices, Ethics in Conservation. 2. Science of inorganic materials Stone objects – Technique and composition, Metal objects – technique and composition, Ceramics – Stucco, terracotta, stoneware, porcelain and glass, Archaeological monuments and materials. 3. Science of organic materials Wooden objects – Techniques and composition, Paper-based materials - manuscripts and archival materials, Palm leaves, Birch bark, Bhojpatra, Textiles - Varieties and composition, Objects of animal origin - Bones, ivories and leather 4. Science of composite materials Paintings construction of painted surfaces, Watercolour paintings, tempera paintings, gouache paintings, Oil paintings, acrylic paintings and wall paintings 5. Process of deterioration - Physical and chemical deterioration of cultural property, Biodeterioration of cultural property, Pollutants and their effects on cultural property 6. Preventive conservation and Microclimate management -Museum climate - Temperature, Relative humidity and Lighting systems, Integrated pest management, Handling and storage of cultural property 7. Scientific examination and dating techniques - Visual examination of art objects, Scientific examination - ultraviolet radiation, infrared radiation, x-rays, Examination of objects at the molecular level, Connoisseurship and scientific authentication, Dating techniques for cultural materials.

MAT101 - Discrete Mathematics Credits: 3

This course provides introduction to the essential concepts of discrete mathematics that are necessary for practicing engineers and scientists and for higher level studies in computer science, mathematics and logic. Included topics are predicate calculus, methods of proofs, sets, counting, sequences, recurrence and graphs.

MAT203 - Differential Equations and Linear Algebra Credits: 3

The course has two components – Differential Equations and Linear Algebra. In Differential Equations, the course will introduce students to the concept of differential equations, how they

arise in real life situations and their importance in Mathematical modelling. We will then concentrate on methods of solving first order equations and second order linear equations. Linear Algebra will take the students through to solving a system of linear equations – concept of Null Space, Row space of a matrix, Rank of a matrix. Concept of Vector spaces will be introduced and discussed in detail with emphasis on basis and dimension and linear transforms from one Vector space to another. Projection of a vector onto a vector space and its use in Least Sq uares Approximations will be discussed. The eigenvalues and eigenvectors of matrices will be introduced and their usefulness in diagonalization will be discussed. If time permits, the Singular Value decomposition will be discussed

MAT248 - Applied Linear Algebra Credits: 3

This is a core course on Linear Algebra for undergraduate students of Computer Science and Engineering. In addition to introducing the basic concepts of Linear Algebra, the course attempts to illustrate computer science specific applications.

MAT281 - Multivariable Calculus Credits: 3

This is the first course in mathematics taken by all engineering students, BS (Physics) students and anyone else who is interested in basic techniques of differential calculus of one and many variables. The course is highly applications oriented. Graphical visualization will be encouraged. Python code will be shared with interested students. The emphasis is on engineering and physics applications. The major topics covered are vectors, dot products, determinants, matrices,
review of single variable calculus, continuity, differentiability, limits, Taylor and McLaurin series, convergence, partial derivatives, chain rules, extremum values, gradient, directional derivatives, Lagrange's multipliers Integral Calculus: Double integrals, polar coordinates, change of variables, Line integrals in plane, conservative fields, Gradient fields and potential, Integral theorem for Gradients, Spherical and Cylindrical Polar coordinates, Divergence and Curl, Gauss's theorem and Stokes' theorem, Examples of triple integrals in polar coordinates

MEC200 - Kinematics and Structure of Machines Credits: 3

The course is divided into the following modules: Module I: Introduction: Kinematic pairs, Kinematic chains, Kinematic linkage, Kinematic mechanism, Degrees of Freedom and Kinematic inversions. Module II: Velocity and Acceleration analysis in Mechanisms: Analytical and Graphical Approach, Kennedy's Theorem, Instantaneous Centre of Rotation, Coriolis Component of Acceleration. Module III: Synthesis of generation. Mechanisms: Function Path generation and Motion generation, Relative Pole method, Inversion method. Module IV: Kinematics of Cams: Types of Cam and Follower, Types of follower motion, Displacement diagrams, Design of Cam Profiles. Module V: Kinematics of Gears and Gear trains: Introduction, Fundamental Law of Gearing, Gear Ratio, Analysis of Simple, Compound and Epicyclic Gear trains.

MEC301 - Dynamics of Machines and Vibrations Credits: 3

The course will cover the following topics, systematically divided into four modules to provide a better insight and depth to the students in each topic. Module I: Static and Dynamic force analysis Static force analysis - Applied and Constraint forces, Force conventions, Free body diagrams, Superposition principle, Static Force analysis of planar mechanisms Dynamic force analysis – D Alembert's principle, Dynamic force analysis of planar mechanisms, Inertia forces and torques, Dynamic force analysis in reciprocating engines, Flywheel, Turning moment diagrams, Energy and Speed fluctuations in engine. Module II: Static and Dynamic Balancing Static and dynamic balancing, Balancing of rotating masses, Balancing a single cylinder engine, Balancing of Multi-cylinder engine, Balancing of reciprocating masses, Partial balancing in engines and its effects Module III: Control mechanisms Governors -Types, Gravity controlled governors, spring controlled governors, Properties of Governor -Sensitiveness, Hunting, Isochronism, and Stability. Gyroscopic effects in machines, Gyroscopic effects in Automobiles, ships and airplanes Module IV: Vibrations Free Vibration - Single degree of freedom system, Free vibration, Undamped and damped vibrations, Governing equations of motion, Natural frequency. Forced Vibration - Forced damped vibrations, Magnification factor, Vibration isolation and Transmissibility

MEC302 - Design, Materials and Manufacturing Credits: 4

Lectures:-• An introduction to machine element design, including material selection, followed by design for manufacture and producing the component. • Topics include design basis, along with material selection, for various mechanical

Introduction to Mechanical components. Engineering Design- Materials, Load and Stress Analysis, Deflection and Stiffness• Failure Prevention, Failures Resulting from Static Loading, Fatigue Failure Resulting from Variable Loading• of Various Design Mechanical Elements:• Keys and Couplings• Shafts and Shaft Components• Screws, Fasteners, and the Design of Nonpermanent Joints• Welding, Bonding, and the Design of Permanent Joints• Mechanical Springs• Rolling-Contact

Bearings• Lubrication and Journal Bearings• Gears-General• Spur and Helical Gears• Bevel and Worm Gears• Levers. Clutches, Brakes and Flywheels• Flexible Mechanical Elements• Power Screws• Design for Manufacture (DFM)and Assembly (DFA) Practicals:-• Design exercises on the above followed by generation of manufacturing drawing, process planning, and manufacturing and measurement/quality assurance; introduction to lubrication and failure analysis. • Designing, fabricating and assembling a complete machine that comprises several components; some components will be bought out. A team of students will be given a design mandate to design, make, assemble and operate an engineered product with several components. The design will be developed in an iterative manner using principles of design for manufacture, design for assembly, safety, noise and vibration, lubrication, etc. In the semester, each team will make 2-3 machine products. They could include microprocessor's use and/or instruments. References: (1) Mech Engg Design- Shigley (2) Design of Machine Elements-V Bhandari (3) Design and Manufacture: An Integrated Approach- Rod Black

MEC403 - Manufacturing Systems and

Operations Credits: 2

The course will introduce students to different aspects relating to manufacturing systems that complement the processes of design and manufacturing across a variety of industrial sectors. Topics include manufacturing strategy, manufacturing flexibility, manufacturing complexity, investment decisions using life cycle costing, system reliability and maintenance models, economic design of quality control plans, single and mixed model assembly line balancing, shop floor scheduling algorithms, lot sizing and inventory control models, performance modelling of manufacturing systems, and production control mechanisms like Kanban, CONWIP and POL2. Practical examples will include experiments on the design of optimal acceptance sampling plans, design of optimal control charts, simulation of process failures, simulation of machine failures and simulation of job shops and production lines with various production control mechanisms.

MEC404 - Integrated Mechanical Laboratory II

Credits: 2

MEC405 - Learning Factory Project Credits: 3

MEC510 - Automobile Engineering Credits: 3

The course will cover the various components of an automobile system such as engine, transmission system, braking system, suspension system, axle and steering system. The competency of analyzing the performance of vehicle is developed through this course. The students will be exposed to different aspects of an automobile

such as wheel alignment and balancing, and exhaust emissions control techniques. Finally, it provides an overview of the influential automobile technologies such as electric vehicles and hybrid vehicles, etc. Unit-1 Introduction to Automobile Engineering Overview of automobilesUnit-2 IC Engines Introduction to Engines, Four-stroke engines, Two-stroke Turbocharger, SuperchargerUnit-3 engines, Transmission and Ignition System Clutch, Gear box, Propeller shaft, Differentials, AxlesUnit-4 Cooling and Lubrication System Introduction, Methods of cooling, Air cooling system, Water cooling system Unit 5: Chassis and Suspension System Introduction and Functions, Classification of chassis, Suspension Systems Unit 6: Braking and Steering System Introduction, Classification of brakes, Drum brake, Disc brake, Air brake, Power brake, ABS technology Unit 7: Fuel Supply System Introduction, Types of injection, Throttle Body Fuel Injection, Multi-Port Injection, Sequential Injection, Direct Injection Unit 8: Exhaust Emissions Control in Automobiles Introduction, Catalytic Converter, Exhaust gas recirculation (EGR)Unit 9: Recent Developments in Modern Vehicles Introduction, Electric vehicles

PHY711 - Introduction to General Relativity Credits: 3

In all academic disciplines other than General Relativity, space and time are believed to be merely the passive medium in which everything else takes place. In General Relativity, the stage itself becomes one of the major players in the drama! In the past hundred years, not only have these counter-intuitive ideas been experimentally verified, they have also shaped our thinking about some of the most fundamental questions about the nature of reality. A firm grounding in General Relativity is absolutely necessary to understand the current exciting advancements in various fields such as Gravitational Waves, Black Hole Physics, Relativistic Astrophysics, Cosmology, Quantum Field Theory in Curved Spacetime, extra dimensions, Quantum Gravity etc. Moreover, various ideas in modern theoretical physics (e.g. gauge-gravity duality) also connect the physics of General Relativity (i.e. physics in curved spacetime) with the physics of strongly coupled quantum systems (such as the kind of systems conventionally studied in condensed matter physics).This is an entry level course into the exciting world of General Relativity.

PHY713 - Special Topic : Introduction to Cosmology Credits: 3

This is an introductory course on cosmology: the scientific study of the evolution of the universe

PHY714 - Special Topic : Introduction to Quantum Field Theory Credits: 3

This is an introductory course on relativistic Quantum Field Theory: the language in which we describe the behavior of elementary particles (which are the fundamental building blocks of nature).

THE670 - Thesis/Project Progress Assessment - I Credits: 3

THE671 - Thesis / Project Progress Assessment - 2 Credits: 2

THE672 - Thesis / Project Progress Assessment

- 3 Credits: 3

THE673 - Thesis / Project Progress Assessment - 4 Credits: 4

Undergraduate College

FDP101 - Democracy and Justice Credits: 3

It may be argued that democracy has emerged as the most desirable, if not the most successful, form of government in the contemporary world. Regardless of whether we like a particular democracy or not, arguments about what is the most legitimate and just form of rule point towards democracy. Why is democracy seen as the most just form of rule? How did such a situation come about historically? Is there evidence to show that, all things considered, democracies are indeed the most just form of government known to us? Are there specific civic virtues that help democracies flourish? Is there a particular way in which agreement, dissent, cooperation, and conversation between different groups and individuals in a democratic society is to be carried out? Would democracy be a necessary component of a just system of government? And would social justice be a necessary component of democratic government? These are some of the questions that this course will tackle. The entire course is built on two central ideas about democracy: a) how best to safeguard against arbitrary exercise of state power, and b) how best cultivate the virtue of democratic conversation. The course is divided into four taught modules and a fifth project

module. Each of the four modules are built around a normative statement, which is supposed to provoke and organise the discussions within that module. The four normative statements are: Module 1: "Democracy is the most just form of government" Module 2: "Rights take precedence over popular will" Module 3: "Inequality is antithetical to democracy"

FDP102 - Environment and Climate Change Credits: 3

Since time immemorial, human activities have significantly impacted the nature of our planet. Issues such as depleting resources, climate extremes, land degradation, food insecurity, unsustainable consumption and unequal access to resources, pollution, ecosystem degradation and extinction of species have posed challenges of sustainability that span spatial and temporal scales. However, in the recent past, efforts related to conservation and sustainability have also increased manifold, paving the way for a slightly hopeful future. On the crossroads of these vectors, multiple questions such as: what are the sustainability challenges facing humanity? How do we measure environmental footprints? How do we assess uncertainties and risks? Who bears the burden of costs and risks? Can we make our consumption behavior sustainable? How do we create, replicate and upscale innovative ideas? How do we evolve a just governance system to share costs and benefits equitably?, etc. need to be addressed and answered. The millennials must be equipped to comprehend and answer these questions in a meaningful and an engaging manner. This course, through an integration of diverse domains - materials, data science, biology and life, behaviour, communication, and constitution and civilization, will expose students to 1. appreciate and develop an integrated

understanding of these issues and their interactions, 2.

FDP103 - Neighbourhoods Credits: 3

This course will dwell upon the idea of the neighborhood. The course will explore ways of understanding the neighborhood in geographic, historical, cultural, governance terms, as well as its biodiversity, lifestyle and health profile, economic and social characteristics, and physical attributes among other aspects. The course begins defining and conceptualising with neighbourhood. Students would visualize the neighborhood using different thematic maps, and the evolution of cultural and social characteristics of the neighborhoods would be investigated. Analysis of demographic features, livelihood profiles, governance structures, and flow of services would enable students to appreciate modern neighbourhoods. Biodiversity would be explored to evaluate the biological richness of the neighbourhood. Health status and lifestyle of the individual in the neighborhood would be surveyed. Students would also get an opportunity to explore the physical nature of the neighbourhood. The course will anchor hands-on learning activities in the contexts of a few local neighbourhoods. Students, working in groups, will observe and engage in surveying and document data on the above themes. Besides, students will get a broader perspective on demographic, economic and social characteristics from the population census data and health status from the CMIE economic outlook data. Students will then engage in analyzing the data to understand the neighbourhood. The learning from this course would facilitate students to build a vision around the interplay of the environment, behaviour, and development associated with the

neighbourhoods.

FDP104 - Water Credits: 3

The two extreme points from where we look at water could be "Water is life, and clean water means health" - Audrey Hepburn, or an extremely scary angle e.g., "World War III will be fought over water"- Special Broadcasting Service (Aug 17, 2017). Both highlight the urgency for us to act - as citizens and as scientists. However, how much do we think of water? How much do we know of this resource apart from what we have read in our school textbooks? Is the water crisis real? Are we taking the right decisions today to secure a better future for the coming generations? How can I, as an individual and as a community participate in the process? Also, as the driver for all forms of life on earth, water is an excellent solvent, however, this excellent solvent's characteristic, when combined with its flow, makes it a potent carrier of pollutants and pathogenic microorganisms that are often harmful to health. So, what makes water safe to consume and use for many other purposes? Is the water in surface and groundwater bodies in the Ahmedabad area safe for all forms of life? Is it potable? This course will turn students into aware citizens of the country by enabling them to ask relevant questions around the subject of water.