

Report of Core Curriculum Committee
Semester Second Year 2018 - 19

1. Guidelines for Drawing Instructors and Tutors from Various Departments

1.1 List of Core Courses and respective Departments handling them as per MA Committee when Instructors are drawn from Multiple Departments

Course No. & Title	Department							
	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
TA101(Engineering Graphics)	CE	CE	ME	ME	CE	CE	AE	AE
ESO201(Thermodynamics)	AE	AE	CHE	CHE	ME	ME	CHE	CHE
ESO202(Solid Mechanics)	ME	ME	CE	CE	AE	AE	CE	CE
ESO204(Fluid Mechanics)	CHE	CHE	AE	AE	CHE	CHE	ME	ME
HSSO201 (Applied Probability and Statistics)	CE	ECO	ECO	CE	ECO	ECO	CE	ECO
HSS –I	HSS/ECO	HSS/ECO	HSS/ECO	HSS/ECO	HSS/ECO	HSS/ECO	HSS/ECO	HSS/ECO
HSS-2	HSS/ECO	HSS/ECO	HSS/ECO	HSS/ECO	HSS/ECO	HSS/ECO	HSS/ECO	HSS/ECO

1.2 List of Core Courses and respective Departments handling them as per MA Committee when Instructors are drawn from a Fixed Department

Department	Course(s)
BSBE	LIF101, ESO206
CHM	CHM101, CHM102, CHM102R, CSO202, CSO203A
CE	ESO208
CSE	ESC101, ESO207
EE	ESC201, ESO203
HSS	HSS-I, ENG112, HSS-II, COM200
ME	TA202,
MSE	TA201,
MTH	MTH101, MTH101R, MTH102, MSO201,
PHY	PHY101, PHY102, PHY103, PSO201

1.3 List of Core Courses and Respective Departments that will provide Theory and Lab Tutors / Instructors

Course No.	Course Name	Departments that Provide Tutors / Lab Instructors
CHM101	Chemistry Lab	CHM
CHM102A	General Chemistry	CHM
MTH101	Mathematics-I	MTH
MTH101	Mathematics-II	MTH
PHY101	Physics Lab	PHY
PHY102	Physics-I	PHY
PHY103	Physics-II	PHY
ESC101	Intro to Computing	CSE
LIF101	Life Science	BSBE
TA101	Engineering Graphics	AE, CE, ME
ENG112	English Language	HSS
HSS-I(1)	Humanities-I	HSS
ESC201	Electronics	EE
TA201	Manufacturing Lab	MSE
TA202	Mechanical Lab	ME
COM200	Communication	CE, IME, HSS, ES
HSS-I(2)	Humanities-I	HSS
ESO201	Thermodynamics	AE, CHE, ME
ESO202	Mechanics of Solids	AE, CE, ME
ESO203	Intro Electrical Engg.	EE
ESO207	Data Structures	CSE
MSO201A	Probability And Statistics	MTH
PSO201A	Quantum Physics	PHY
HSO201A	Applied Probability And Statistics	CE
CSO202A	Atoms, Molecules And Photons	CHM
CSO203A	Inorganic Molecules, Materials & Medicine	CHM

Note: Table constructed using data from previous years.

2. Estimate of Number of Students in Core Courses in Second Semester during the Year 2018-19

Course Group	Course No.	Course Name	Estimated Number of New Students	No. of Students Failed in 2017-18(II)	No. of Students Registered in 2017-18(II)	Final Estimate for 2018-19 – Sem. II
Second Semester Courses	CHM101	Chemistry Lab Gen.	450	02	422	452
	CHM102	Chemistry	900	14	827	914
	MTH102	Mathematics-II	900	61	794	961
	PHY101	Physics Lab Physics-I	450	01	410	450
	PHY102	Physics-II	450	36	428	486
	PHY103	Computing	450	70	445	520
	ESC101	Life Sciences	450	15	435	465
	LIF101	Engineering Graphics	450	13	411	463
	TA101		450	02	410	450
Fourth Semester Courses	ESC201	Electronics Manufacturing	425	08	378	435
	TA201	Lab Mechanical Lab	425	05	379	430
	TA202	Communication Skill	425	05	472	430
	COM200		300	02	253	300
Engineering Science options	ESO201	Thermodynamics Mechanics	150	27	127	150
	ESO202	of Solids Intro Elect.	210	27	153	210
	ESO203	Engineering Data Structures	250	14	236	250
	ESO207		250	07	97	250
Science options	MSO201	Probability And Statistic	350	31	346	350
	PSO201	Quantum Physics	150	23	133	150
	CSO202	Atoms, Molecules&Photons	125	38	160	125
	CSO203	Inorganic Molecules, Materials &	150	-	-	150
	HSO201	Applied Probability And Statistics	150	03	185	150
Repeat	MTH101	Mathematics-I	75	14	86	125

3. Teaching Support Requirement

Course No.	Course Name	Units	No. of Students (Estimate)	Student per Section(Appx)	Number of			Total Units (Inst.+tut/lab)
					Theory Tutors	Lab. Tutors	Instruction Units	
CHM101A	Chemistry lab	0-0-3[3]	452	35	0	14	1	1+14=15
CHM102A	Gen. Chemistry	2-1-0[8]	914	35	24	0	3	3+24=27
MTH102A	Mathematics-II	3-1-0[11]	961	100	9		4	9+4=13
PHY101A	Physics Lab	0-0-3[3]	450	35		14	1	1+14=14
PHY102A	Physics-I	3-1-0[11]	486	100	5		2	2+5=7
PHY103A	Physics-II	3-1-0[11]	520	100	5		2	2+5=7
ESC101A	Computing	3-1-3[14]	465	35	14	14	2	2+14=18
LIF101A	Life Science	2-0-0[6]	463	35			1.5	1.5+0=1.5
TA101A	Engineering Graphics	2-0-3[9]	450	35		14	1.5	1.5+13=14.5
ESC201A	Electronics	3-1-3[14]	435	35	12	12	2	2+12=14
TA201A	Manufacturing Lab	1-0-3[6]	430	90		5	1	1+5=6
TA202A	Mechanical Lab	1-0-3[6]	430	90		5	1	1+5=6
COM200	Communication Skill	1-0-2[5]	300	35		09	1	1+9=10
ESO201A	Thermodynamics	3-1-0[11]	150	35	4		1.5	1.5+4=5.5
ESO202A	Mechanics of Solids	3-1-0[11]	210	35	6		2	2+6=8
ESO203A	Intro Elect. Engineering	3-1-2[13]	250	35	7	7	2	2+7=9
ESO207A	Data Structure	3-0-0[09]	250				2	2+0=2
MSO201A	Probability and Statist	3-1-0[11]	350	100	4		2	2+4=6
PSO201A	Quantum Mechanics	2-1-0[8]	150	35	4		1.5	1.5+4=5.5

CSO202A	Atoms, Molecules, Photons	3-1-0[11]	125	35	4		1.5	1.5+4=5.5
CSO203A	Inorganic Molecules, Materials & Medicine	3-1-0[11]	150	35	5		1.5	5+1.5=6.5
HSO201A	Applied Prob. & Stat.	3-1-0[11]	150	100	2		1.5	1.5+2=3.5
MTH101R	Mathematics-I	3-1-0[11]	75	100	1		1.5	1.5+1=2.5

Note:1. When a course has tutorials and lab, then the tutor is supposed to take care of both.

2. Instruction Units:

Only lab course: 1.0; Lecture Course (class size < 60): 1.0;

Lecture Course (60 _class size < 150): 1.5; Lecture Course (150 _class size < 600): 2.0 (3 lec/wk), 1.5 (2 lec/wk), 1.0 (1 lec/wk); Lecture Course (600 _class size): 4.0 (3 lec/wk), 3.0 (2 lec/wk), 2.0 (1 lec/wk); Tutorials: 1.0

3. TA201 lab capacity is 90 and it is split into 3 sections. One instructor handles all the 3 sections simultaneously. In all other courses the section size may be increased by at most 5.

4. Department/IDP-wise Breakup of Instructor's and/or Tutors for Core Courses in Second Semester during the Year 2018-19:

Course No.	Course Name	Units Reqd	AE	BSBE	CHE	CE	CSE	EE	IME	ME	MSE	CHM	MTH	PHY	HSS	ECO	ES	TOTAL
CHM 101	Chemistry Lab	13.0										1+14						1+14
CHM 102	Chemistry Lab	27.0										3+24						3+24
MTH 102	Mathematics-II	13.0											4+9					4+9
PHY101	Physics Lab	14.0												1+14				1+14
PHY102	Physics-I	7.0												2+5				2+5
PHY103	Physics -II	7.0												2+5				2+5
ESC101	Fund. Of Computing	18.0					2+16											2+16
LIF101	Life Sciences	1.5		1.5+0														1.5+0
TA101	Engineering Graphics	14.5	0+5			1.5+4				0+4								1.5+13
ESC201	Electronics	14.0						2+11										2+11
TA201	Manufact. Proc. (MSE)	6.0									1+5							1+5
TA202	Manufact. Proc. (ME)	6.0								1+5								1+5
COM200	Communication Skills	10.0				0+1			0+6						1+2			1+9
ESO201	Thermodynamics	5.5	1.5+0		0+1					0+3								1.5+4
ESO202	Mechanics of Solids	8.0	0+1			0+3				2+1	0+1							2+6
ESO203	Intro. Electrical Engg.	9.0						2+7										2+7
ESO207	Data Structures	2.0					2+0											2+0
MSO201	Probability & Statistics	6.0		0+1				0+2					2+1					2+4

PSO201	Quantum Mechanics	5.5									0+2			1.5+2				1.5+4
CSO202	Atoms, Molecules, Photons	5.5			0+3							1.5+1						1.5+4
CSO203	Inorganic Molecules, Materials & Medicine	6.5										1.5+5						1.5+5
HSO201	Applied Prob. & Stat.	3.5				1+1										0+1		1.5+2
MTH101R	Mathematics-I	2.5											1.5+1					1.5+1
Total Load Assigned			7.5	2.5	4.0	11.5	20	24	6	16	9	51.0	18.5	31.5	5.5	1	0	208.0
Approximate Faculty Strength			27	14	20	35	32	42	14	37	24	28	39	37	25	0	8	
Ratio of Load Assigned : Faculty			0.28	0.18	0.20	0.3	0.625	0.57	0.43	0.43	0.375	1.82	0.47	0.85	0.22	0.13	0.13	

Units are assigned as 'm + n', where 'm' indicate instructor units and 'n' indicates tutor units.

Chairman, Core Curriculum Committee