

Report of Core Curriculum Committee
Semester Second Year 2017 - 18

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. and Title	Department			
	2010-11 & 2011-12	2012-13 & 2013-14	2014-15 & 2015-16	2016-17 & 2017-18
TA101(Engineering Graphics)	CE	ME	CE	AE
ESO201(Thermodynamics)	AE	CHE	ME	CHE
ESO202(Solid Mechanics)	ME	CE	AE	CE
ESO204(Fluid Mechanics)	CHE	AE	CHE	ME

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, CSO201, CSO202
CE	ESO208
CSE	ESC101, ESO207
EE	ESC201, ESO203
HSS	HSS-I, ENG112, HSS-II, COM200
ME	TA202, ESO209
MSE	TA201, ESO205
MTH	MTH101, MTH101R, MTH102, MTH102R, MSO201, MSO202a, MSO203b
PHY	PHY101, PHY102, PHY103, PSO201
ECO	HSO201A

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	ECO
CSO201A	Organic Chemistry: Fundamentals And Applications	CHM
CSO202A	Atoms, Molecules And Photons	CHM

2. Estimate of Number of Students in Core Courses in First (I) Semester during the Year 2017-18

Course Group	Course No.	Course Name	Estimated Number of New Students	No. of Students Failed in 2016-17(II)	No. of Students Registered in 2016-17(II)	Final Estimate for 2017-18 – Sem. II
Second Semester Courses	CHM101	Chemistry Lab	420	2	424	420
	CHM102	Gen. Chemistry	840	23	828	860
	MTH102	Mathematics-II	840	36	794	880
	PHY101	Physics Lab	420	04	405	425
	PHY102	Physics-I	420	78	428	500
	PHY103	Physics-II	420	39	445	450
	ESC101	Computing	420	107	435	530
	LIF101	Life Sciences	420	31	411	450
	TA101	Engineering Graphics	420	16	410	435
Fourth Semester Courses	ESC201	Electronics	420	50	378	470
	TA201	Manufacturing Lab	420	9	379	430
	TA202	Mechanical Lab	420	37	472	460
	COM200	Communication Skill	350	25	253	375
Engineering Science options	ESO201	Thermodynamics	150		104	150
	ESO202	Mechanics of Solids	210		167	210
	ESO203	Intro Elect. Engineering	250		251	250
	ESO207	Data Structures	250		141	250
Science options	MSO201	Probability And Statistic	350		426	300*
	PSO201	Quantum Physics	150		113	150
	CSO201	Organic Chemistry	225		186	225
	CSO202	Atoms, Molecules And Photons	125		88	125
	HSO201	Applied Probability And Statistics	150		186	150
Repeat	MTH101	Mathematics-I	75	59	84	125

* Based on discussion with HoD of MTH department, a registration cap of 300 is recommended. Departments for which this course is compulsory will be given preference during registration. The MTH department will try to offer the course in summer semester.

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]	420	35	0	12	1	1+12=13
CHM102A	Gen. Chemistry	2-1-0[8]	860	35	24	0	3	3+24=27
MTH102A	Mathematics-II	3-1-0[8]	880	100	9		4	9+4=13
PHY101A	Physics Lab	0-0-3[3]	425	35		12	1	1+12=13
PHY102A	Physics-I	3-1-0[11]	500	100	5		2	2+5=7
PHY103A	Physics-II	3-1-0[11]	450	100	5		2	2+5=7
ESC101A	Computing	3-1-3[14]	530	35	16	16	2	2+16=18
LIF101A	Life Science	2-0-0[6]	450				1.5	1.5+0=1.5
TA101A	Engineering Graphics	2-0-3[9]	435	35		12	1.5	1.5+12=13.5
ESC201A	Electronics	3-1-3[14]	470	40	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]	460	90		5	1	1+5=6
COM200	Communication Skill	1-0-2[5]	375	35		11	1	1+11=12
ESO201A	Thermodynamics	3-1-0[11]	120	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]	300	100	3		2	2+3=5
PSO201A	Quantum Mechanics	2-1-0[8]	150	35	4		1.5	1.5+4=5.5
CSO201A	Basic Org. Chem.	3-1-0[11]	225	35	7		2	2+7=9
CSO202A	Atoms, Molecules, Photons	3-1-0[11]	125	35	4		2	2+4=6
HSO201A	Applied Prob. & Stat.	3-1-0[11]	150	100	2		2	2+2=4
MTH101R	Mathematics-I	3-1-0[11]	125	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 First (I) Semester during the Year 2017-18

Course No.	Course Name	Units Req'd	AE	BSBE	CHE	CE	CSE	EE	IME	ME	MSE	CHM	MTH	PHY	HSS	ES	ECO	TOTAL
CHM 101	Chemistry Lab	13.0										1+12						1+12
CHM 102	Chemistry Lab	27.0										3+24						3+24
MTH 102	Mathematics-II	13.0											4+9					4+9
PHY101	Physics Lab	13.0												1+12				1+12
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	13.5	1.5+4			0+4				0+4								1.5+12
ESC201	Electronics	14.0						2+12										2+12
TA201	Manufact. Proc. (MSE)	6.0									1+5							1+5
TA202	Manufact. Proc. (ME)	6.0								1+5								1+5
COM200	Communication Skills	12.0				0+1			0+7						1+2	0+1		1+11
ESO201	Thermodynamics	5.5			1.5+1					0+3								1.5+4
ESO202	Mechanics of Solids	8.0	0+2			2+1				0+2	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	5.0		0+1				0+2					2+0					2+3
PSO201	Quantum Mechanics	5.5									0+2			1.5+2				1.5+4
CSO201	Basic Org. Chem.	9.0										2+7						2+7
CSO202	Atoms, Molecules, Photons	6.0			0+3							2+1						2+4
HSO201	Applied Prob. & Stat.	4.0				0+1											2+1	2+2
MTH101R	Mathematics-I	2.5											1.5+1					1.5+1
Total Load Assigned			7.5	2.5	5.5	9	20	25	7	15	9	52	17.5	30.5	3	1	3	208.5
Approximate Faculty Strength			24	14	20	29	30	39	14	36	25	26	36	36	25	8	12	
Ratio of Load Assigned : Faculty			0.31	0.18	0.28	0.31	0.67	0.64	0.50	0.58	0.36	2.00	0.49	0.85	0.12	0.13	0.25	

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