REPORT OF THE CORE CURRICULUM COMMITTEE (CCC) ASSIGNING CORE TEACHING LOAD FOR 2014-2015-II SEMESTER

GUIDELINES FOR DRAWING INSTRUCTOR-IN-CHARGE FOR CORE COURSES

Based on the report of the Manindra Agarwal committee, the instructor-in-charge for the courses below will be drawn from various depatments as per the schedule below.

Course No and Title	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

The instructor-in-charge for the various other core courses shall be provided at all times by various departments as given below.

Department	Course(s)
BSBE	LIF101, ESO206
CHM	CHM101, CHM102, CHM102R, CSO201, CSO202
CE	ESO208
CSE	ESC101, ESO207
EE	ESC201, ESO203
HSS	HSS-1, ENG112, ENG112R, HSS-II
ME	TA202, ESO209
MSE	TA201, ESO205
MTH	MTH101, MTH101R, MTH102, MTH102R, MSO201, MSO202a, MSO203b
PHY	PHY101, PHY102, PHY103, PSO201

Core course teaching requirements for academic session 2014-2015 II semester

Course(s)	Course no	Course name	units	No of students (estimated)	No of sections		Instruction units	Total (instruction and tutorial) units
					Tutorials	Lab		
Second semester courses	CHM101	Chemistry lab	0-0-3 [3]	420	-	12	1	13
	CHM102	chemistry-I	2-1-0 [8]	840	24	-	3$	27
	MTH102	mathematics-ii	3-1-0 [11]	840	8	-	4	12
	PHY101	Physics lab	0-0-3 [3]	420	-	12	1	13
	PHY102	physics-i	3-1-0 [11]	420	5	-	2	7
	PHY103	physics-ii	3-1-0 [11]	420	5	-	2	7
	ESC101	computing	3-1-3 [14]	420	12	12	2	14
	LIF101	Life sciences	2-0-0 [6]	420	-	-	1.5#	1.5
	TA101	Engineering graphics	2-0-2 [8]	420	-	12	1.5#	13.5
Fourth semester courses	ESC201	electronics	3-1-3 [14]	420	12	12	2	14
	TA201	Manufacturing lab	1-0-3 [6]	420	-	5	1*	6
	TA202	Mechanical lab	1-0-3 [6]	420	-	5	1*	6
	COM200	Comm skills	1-0-2 [5]	420		14	1*	15
Engineering science options	ESO201	thermodynamics	3-1-0 [11]	150	2	-	1.5	3.5
	ESO202	Mechanics of solids	3-1-0 [11]	315	9	-	2	11
	ESO203	Intro electr engineering	3-1-2 [13]	245	7	7	2	9
Science options	MSO201	Prob and Stats	3-1-0 [11]	520	5	-	2	7
	PSO201	Quantum mech.	2-1-0 [8]	210	6	-	1.5	7.5
	CSO201[1]	Basic Organic Chem	3-1-0 [11]	0	0	-	-	-
	CSO202	Atoms, mol, photons	3-1-0 [11]	250	7	-	2	9
Repeat	MTH101R	mathmatics-i	3-1-0 [11]	70	1	-	1.5	2.5
	ENG112R	Intro to english	3-1-0 [11]	35	1	-	1	2
Total units required =200.5	Science Units = 103 Engineering science units = 78.5 ENG112R = 2.0 COM200=15							

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

2. Instruction unit

Only lab courses: 1.0
Lecture course (class size <60) : 1.0
Lecture course (60 to 150): 1.5
Lecture course (>150 to 600) : 2.0; #1.5 if 2 lectures/wk, *1.0 if 1 lecture/wk
Lecture course (>600): 4.0; $3.0 if 2 lectures/wk
tutorials: 1.0

1 Not being offerred by department in 2nd semester 2014-15.

Department wise distribution of core course instructors for 2014-15 2nd semester

Sr No	Department	Course(s)
1	AE	ESO202
2	BSBE	LIF101
3	CHE	
4	CHM	CHM101, CHM102, CSO102
5	CE	TA101
6	CSE	ESC101
7	EE	ESC201, ESO203
8	HSS	HSS-I, ENG112R, HSS-II, COM200
9	MTH	MTH102, MTH101R, MSO201
10	ME	ESO201, TA202
11	MSE	TA201
12	PHY	PHY101, PHY102, PHY103, PSO201

Important notes

1. As per the senate minutes 2013-14/7th item 11, student TA from dual degree students who have moved to PG part in 4th year and MS/Msc(I) students in final year, can be used. It is department's discretion to us this enabling clause.
2. Section size is normally 35, except in MTH102, MTH101R, PHY102, PHY103 and MSO201 where section size is normally 100.
3. One tutor will be assigned per day (i.e. Per three sections i.e. ~90 students) for TA201 and TA202 labs.
4. Increasing the number of sections in any course is undesirable.
5. Student number in each section may be increased slightly, i.e, up to 40 in sections normally having 35 students and upto 105 in sections normally having 100 students to prevent increase in number of sections.
6. The total registration in some courses has to be restricted considering the seating capacity of the lecture halls assigned for the courses.
7. The number of sections in some ESO/SO courses may be reduced in certain cases after registration, in case the number of students registered is less than expected.

Department/IDP wise allocation of instructor(s)/tutor(s) for core courses in science and engineering for 2013-14, 2nd semester

Course no	Course name	Units reqd.	AE	BSBE	CHE	CE	CSE	Earth Sc	EE	IME	ME	MSE	MSP	CHM	MTH	PHY	HSS	DOFA$	Total
CHM101	Chemistry lab	13												1+12					1+12
CHM102	chemistry-I	27												3+24					3+24
MTH102	mathematics-II	12													4+8				4+8
PHY101	Physics lab	13														1+12			1+12
PHY102	physics-i	7														2+5			2+5
PHY103	physics-ii	7														2+5			2+5
ESC101	computing	14					2+12												2+12
LIF101	Life sciences	1.5		1.5#+0															1.5+0
TA101	Engineering graphics	13.5	0+2			1.5#+4					0+6								1.5+12
ESC201	Electronics	14							2+12										2+12
TA201	Manufacturing lab	6										1*+5							1+5
TA202	Mechanical lab	6									1*+5								1+5
COM200	Comm Skills	15								0+6							1+3	0+5	1+14
ESO201	Thermodynamics	3.5	0+2								1.5+0								1.5+2
ESO202	Mechanics of solids	11	2+0		0+2	0+3					0+3	0+1							2+9
ESO203	Intro to Electrical Engg	9							2+7										2+7
MSO201	Prob and Stats	7				0+1	0+1		0+1	0+1					2+0		0+1		2+5
PSO201	Quantum Mech	7.5										0+2				1.5#+4			1.5+6
CSO201	Basic Org Chemistry	0																	0
CSO202	Atom, Mol, Photon	9			0+2									2+5					2+7
MTH101R	Mathematics-I	2.5													1.5+1				1.5+1
ENG112R	Intro to English	2															1+1		1+1
Total load assigned		200.5	6	1.5	4	9.5	15	0	24	7	16.5	9		47	16.5	32.5	7	5	
Approx Faculty Strength			21	13	19	33	22	3	37	16	34	21	0	29	37	34	31		
Load/faculty			0.29	0.12	0.21	0.29	0.68	0	0.65	0.44	0.49	0.43		1.62	0.45	0.96	0.23		

Units are assigned as 'm+n' where m indicates the lecture units and n indicates tutor units.
*Assigned lower load (only 1 lectures/week)
#Assigned lower load (only 2 lectures/week)
$ DOFA to arrange for these via spouse employment cell.

Appendix

ESO/SO requirements for students from various departments

Students from all departments must take at least 40[2] credits of ESO/SO. Department requirments for such ESO/SO courses are given below. The ESO/SO courses which have to be taken compulsorily by the students (bold) and which may be taken as electives (in italics) of various departments are also shown. The number in brackets show the credits.

Department requirements	Odd semester	Even semester
AE (all compulsory)	**ESO204 (11), MSO202a (6), MSO203b (6)**	**ESO202 (11), ESO201 (11)**
BSBE	**ESO206 (11)** ESO201 (11), ESO202 (11), ESO203 (11), ESO204 (11), ESO205 (11), ESO207 (10), ESO208 (11), ESO209 (8), MSO202a (6), MSO203b (6)	**MSO201 (11)** ESO201 (11), ESO202 (11), ESO203 (11), CSO201 (11), CSO202 (11), PSO201 (8)
CHE (any one from CSO201/CSO202)	**ESO201 (11), ESO208 (11)** **ESO205 (14) – 5th sem**	CSO201 (11) CSO202 (11)
CE (all compulsory)	**ESO202 (11), ESO204 (11), MSO203b (6)** **ESO208 (11) – 5th sem**	**MSO201 (11)**
CHM (at least 11 credits of SO, at least 11 credits of ESO)	ESO201 (11), ESO202 (11), ESO203 (11), ESO204 (11), ESO205 (11), ESO206 (11), ESO207 (10), ESO208 (11), ESO209 (8), MSO202a (6), MSO203b (6)	ESO201 (11), ESO202 (11), ESO203 (11), CSO202 (11), PSO201 (8)
CSE (at least 11 credits of ESO)	ESO201 (11), ESO202 (11), ESO203 (11), ESO204 (11), ESO205 (11), ESO206 (11), ESO207 (10), ESO208 (11), ESO209 (8), MSO202a (6), MSO203b (6)	MSO201 (11), ESO201 (11), ESO202 (11), ESO203 (11), CSO201 (11), CSO202 (11), PSO201 (8)
EE	**MSO202a (6), MSO203b (6)** ESO201 (11), ESO202 (11), ESO204 (11), ESO205 (11), ESO206 (11), ESO207 (10), ESO208 (11), ESO209 (8)	**MSO201 (11), ESO203 (11),** ESO201 (11), ESO202 (11), CSO201 (11), CSO202 (11), PSO201 (8)
ECO (at least 22 credits of SO, at least 11 credits of ESO)	ESO201 (11), ESO202 (11), ESO203 (11), ESO204 (11), ESO205 (11), ESO206 (11), ESO207 (10), ESO208 (11), ESO209 (8), MSO202a (6), MSO203b (6)	**MSO201 (11),** ESO201 (11), ESO202 (11), ESO203 (11), CSO201 (11), CSO202 (11), PSO201 (8)
MSE (all compulsory)	**ESO202 (11), ESO205 (14), MSO203b (6),** **ESO208 (11) – 5th sem**	**PSO201 (8)**
ME (all compulsory)	**ESO201 (11), MSO202a (6), MSO203b (6)**	**ESO202 (11), ESO203 (11)**
MTH	**ESO207 (10) – 5th sem,** ESO201 (11), ESO202 (11), ESO203 (11), ESO204 (11), ESO205 (11), ESO206 (11), ESO208 (11), ESO209 (8)	**MSO201 (11),** ESO201 (11), ESO202 (11), ESO203 (11), CSO201 (11), CSO202 (11), PSO201 (8)
PHY (at least 11 credits of ESO)	ESO201 (11), ESO202 (11), ESO203 (11), ESO204 (11), ESO205 (11), ESO206 (11), ESO207 (10), ESO208 (11), ESO209 (8), MSO202a (6), MSO203b (6)	**PSO201 (8),** ESO201 (11), ESO202 (11), ESO203 (11), CSO201 (11), CSO202 (11)

2 Modified to 40 minimum credits in senate meeting 2012-13/8th item 9.

Availability of elective seats in various ESO/SO courses in the even semester

Course	Projected maximum Registration	Compulsory seats	Elective seats	Registration in 2012-13-II
ESO201 (thermodynamics) 3-1-0-11	150	48(AE)*	57	93
ESO202 (mechanics of solid) 3-1-0-11	315	48(AE)* 99(ME)*	168	156
ESO203 (Intro to electrical engg) 3-1-2-13	245	131(EE)* 99(ME)*	15	242
CSO201 (Basic Organic Chemistry) 3-1-0-11	0	0	0	
CSO202 (Atoms, Mol, Photons) 3-1-0-11	250	0	250	133
MSO201 (Prob and Stat) 3-1-0-11	480 + 41 (Msc 2Yr)	40(BSBE)* 105(CE)* 131(EE)* 40(ECO)* 92(CSE)* 49(MTH)* 41(Msc 2Yr)*	23	516
PSO201 (Quantum Mechanics) 2-1-0-8	210	28(PHY)* 97(MSE)*	85	120

*compulsory in 4th semester
$Cannot increase class size due to lab component
#compulsory in 2nd semester for Msc 2Yr math
Room allocation to be done by DoAA as per the actual registration.