

ACADEMIC REGULATIONS FOR FOUR-YEAR UNDERGRADUATE DEGREE PROGRAMS

(Applicable to students from the Academic Year 2016-16 and onwards)

Branch: EEE

Semester 1						
	Code	Course	L	T	P	Credits
1	MA 101	Math I: Calculus & Ordinary Differential Equations	4	2	0	5
2	PH 101	Physics I: Mechanics & Thermodynamics	4	2	2	6
3	EE 101	Basic Electrical Engineering	2	1	2	3.5
4	ME 101	Introduction to Engineering Design	2	0	2	3
5	SE 101	Introduction to Society & Technology	1	1	0	1.5
6	HS 101	Literature & Philosophy	1	2	0	2
7	HS 102	French Language & Culture	0	2	0	
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Semester 2						
	Code	Course	L	T	P	Credits
1	MA 102	Math II - Linear Algebra & Applied Analysis	4	2	0	5
2	CB 101	Chemistry	4	2	2	6
3	EE 102	Electronics	2	1	2	3.5
4	CS 101	Introduction to Computer Sciences	2	0	2	3
5	SE 102	Media Project	1	1	0	1.5
6	HS 103	Indian English Literature	1	2	0	2
7	HS 104	French Language & Culture	0	2	0	
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MAHINDRA ÉCOLE CENTRALE

Semester 3						
	Code	Course	L	T	P	Credits
1	MA 203	Mathematics- III	4	2	0	5
2	PH 202	Physics II	4	2	2	6
3	ME 202	Solid Mechanics & Fluid Mechanics	2	2	0	3
4	CS 202	Data Structures & Algorithms	2	1	1	3
5	SE 203	Design Thinking	1	0	2	2
6	SE 205	Introduction to Economy	1	1	0	1.5
7	HS 205	English & Humanities -III	1	1	0	1.5
8	HS 206	French Language & Culture-III	0	2	0	
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Semester 4						
	Code	Course	L	T	P	Credits
1	MA 204	Mathematics- IV	3	2	2	5
2	CB 202	Biology	2	0	0	2
3	PH 203	Physics III	2	1	0	2.5
4	ME 203	Material Sciences	2	1	1	3
5	EE 203	Signals & Systems	2	0	2	3
6	EE 204	Electromechanical Energy Conversion-I	2	2	0	3
7	SE 204	Design Project	0	1	3	2
8	HS 207	English & Humanities -IV	1	1	0	1.5
9	HS 208	French Language & Culture-IV	0	2	0	0
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MAHINDRA ÉCOLE CENTRALE

Semester 5						
	Code	Course	L	T	P	Credits
1	MA 305	Mathematics V	3	2	0	4
2	CE 301	Earth and Environmental Sciences	2	0	0	2
3	ME 305	Multiphysics	3	2	0	4
4	EE 309	Programmable Devices and Microprocessors	2	0	2	3
5	EE 311	Integrated Analog and Digital Electronics	2	0	2	3
6	EE 313	Digital Signal Processing	3	0	2	4
7	SE 306	Year-3 Project Phase I	0	2	2	2
8	HS 310	French Language & Culture V	0	2	0	0
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Semester 6						
	Code	Course	L	T	P	Credits
1	MA 306	Mathematics VI	2	0	0	2
2	EE 308	Electromagnetic Waves	3	0	0	3
3	EE 310	Communication Theory I	3	2	0	4
4	EE 312	Power Systems and Electronics	2	2	2	4
5	E1	Elective	X	X	X	3
6	SE 308	Year-3 Project Phase II	0	3	3	3
7	SE 309	Corporate Management and Finance	3	0	0	3
8	HS 312	French Language & Culture VI	0	2	0	0
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MAHINDRA ÉCOLE CENTRALE

Semester 7						
	Code	Course	L	T	P	Credits
1	EE 407	Computer Architecture & Design	2	2	0	3
2	EE 415	Experimental Laboratory	1	0	6	4
3	EE 417	Communication Theory II	3	2	0	4
4	E2	Elective	X	X	X	3
5	E3	Elective	X	X	X	3
6	SE 421	Year-4 Project Phase I	0	2	2	2
7	HS 420	Communication Skills and Personality Development	1	2	0	2
8	HS 414	French Language & Culture VII	0	2	0	0
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Semester 8						
	Code	Course	L	T	P	Credits
1	EE 406	Computer Communication Networks	2	0	2	3
2	E4	Elective	X	X	X	3
3	E5	Elective	X	X	X	3
4	SE 422	Year-4 Project Phase II	0	9	9	9
5	SE 410	Entrepreneurship, IPR, Legal	3	0	0	3
6	HS 416	French Language & Culture VIII	0	2	0	0
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ELECTIVES LIST (for semesters 6, 7 and 8)

S.No.	Code	Course	L	T	P	Credits
1	EE 351	Embedded Systems	2	0	2	3
2	CS 453	Mobile Communication and Computing	2	2	0	3
3	CS 454	VLSI Design Using Verilog	2	0	2	3
4	CS 455	Cryptography and Information Security	3	0	0	3
5	CS 457	Machine Learning	3	0	0	3
6	CS 460	Introduction du database management systems	3	0	0	3
7	EE 451	Semiconductor Processing	3	0	0	3
8	EE 452	Semiconductor Devices	3	0	0	3
9	EE 453	Advanced Power Systems	3	0	0	3
10	EE 454	Image Processing and Computer Vision	3	0	0	3
11	EE 455	Computational Electromagnetics	3	0	0	3
12	EE 456	VLSI Circuits	3	0	0	3
13	EE 457	Information Theory and Coding	3	0	0	3
14	EE 458	Microwave Theory and Techniques	3	0	0	3
15	EE 459	Design for Testability/Co-design	3	0	0	3
16	EE 460	Advanced Electrical Machines	3	0	0	3
17	EE 461	Wireless Sensor Networks	3	0	0	3
18	EE 462	Antenna Theory and Design	3	0	0	3
19	EE 463	RF IC Design	3	0	0	3
20	EE 464	Signal Integrity	3	0	0	3
21	EE 465	Measurements and Instrumentation	3	0	0	3
22	EE 466	Medical Imaging	3	0	0	3
23	EE 467	Radar Signal Processing	3	0	0	3
24	ME 467	Introduction to Robotics	3	0	0	3
25	ME 452	Introduction to Operations Research	3	0	0	3
26	ME 460	Alternative Energy Sources	3	0	0	3
27	CB 304	Chemical and Bio Engineering	3	0	0	3
28	PH 304	Physics IV	3	0	0	3
29	PH 451	Lasers: Principles and Applications	3	0	0	3
30	PH 452	Fiber and Integrated Optics for Optical Communication	3	0	0	3
31	HS 411	Introduction to Social Sciences	3	0	0	3
32	CS 304	Object Oriented Programme Development and Languages	2	0	2	3