CURRICULUM

B.Tech. Computer Engineering (COE) :: 2014 Batch Onward (According to 28th Senate meeting held on 23.12.2015)

Semester 1					
Course Name	I	P	C	Category	Code
Calculus	3	0	3	BSC	MAT104T
Engineering Mechanics	3	0	3	BSC	PHY108T
Computational Engineering /	3	0	3	BEC /	COM105T /
Basic Electrical and Electronics Engineering				BEC	ELE103T
Concepts in Engineering Design/	3	0	3	DES /	DES101T /
Science and Engineering of Materials				BEC	INT108T
English for Communication	2	0	2	HMC	INT107T
Earth, Environment & Design/	2		P/F	DES /	DES103T /
Professional Ethics for Engineers				HMC	MAN102T
Engineering Skills Practice	0	3	2	BEC	INT110P
Materials & Mechanics Practice	0	3	2	BSC	PHY109P
Computational Engineering Practice/	0	3	2	BEC /	COM105P /
Measurement & Data Analysis Practice				BSC	INT111P
Engineering Graphics	1	3	3	BEC	INT109P
Total			23	-	
Semester 2	1				
Course Name	I	P	C	Category	Code
Differential Equations	3	0	3	BSC	MAT105T
Engineering Electromagnetics	3	0	3	BSC	PHY107T
Basic Electrical and Electronics Engineering/		0	3	BEC /	ELE103T /
Computational Engineering	3			BEC	COM105T
Science and Engineering of Materials /	2	0	3	BEC /	INT108T /
Concepts in Engineering Design	3			DES	DES101T
Design History	2	0	2	DES	DES102T
Professional Ethics for Engineers /	_	0	D./E	HMC /	MAN102T /
Earth, Environment & Design	2	0	P/F	DES	DES103T
Measurement & Data Analysis Practice/		3	3 2	BSC /	INT111P/
Computational Engineering Practice	0			BEC	COM105P
Industrial Design Sketching	0	3	2	DES	DES104P
Engineering Electromagnetics Practice	0	3	2	BSC	PHY107P
Design Realization	0	3	2	DES	DES105P
Total			22		
Semester 3	1				
Course Name	Ι	P	C	Category	Code
Linear Algebra	3	0	3	BSC	MAT204T
Systems Thinking for Design	2	0	2	DES	DES201T
Engineering Economics	2	0	2	HMC	MAN201T
Discrete Structures for Computing	3	0	3	PEC	COM205T
Digital and Analog Circuits Design	3	0	3	PEC	COM206T
Signals, Systems and Communications	3	0	3	PEC	ELE216T
Programming and Data Structures Digital and Analog Circuits Design Practice	0	3	2	PEC PEC	COM207T COM206P
Data Structures Practice using C-programming	0	3	2	PEC	COM200P COM207P
Total		3	23	110	CON120/1
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Semester 4					
Course Name	I	P	С	Category	Code
Probability Theory	3	0	3	BSC	MAT205T
Designing Intelligent Systems	2	0	2	DES	DES203T
Sociology of Design	2	0	2	HMC	MAN202T
Design and Analysis of Algorithms	3	0	3	PEC	COM209T
Database Systems	3	0	3	PEC	COM212T
Computer Organization and Design	3	0	3	PEC	COM211T
Object Oriented Algorithm Design and Analysis Practice	0	3	2	PEC	COM210P
Database Systems Practice	0	3	2	PEC	COM212P
Computer Organization and Design Practice	0	3	2	PEC	COM211P
Total			22		
Semester 5	•				
Course Name	I	P	C	Category	Code
Sustainable Design	2	0	2	DES	DES301T
Entrepreneurship and Management Functions	2	0	2	HMC	MAN301T
Operating Systems	3	0	3	PEC	COM301
Computer Networking	3	0	3	PEC	COM302
VLSI System Design	3	0	3	PEC	ELE301T
Automata and Compiler Design	3	0	3	PEC	COM306T
Computer Networking Practice	0	3	2	PEC	COM302P
Operating Systems Practice	0	3	2	PEC	COM301P
VLSI System Design Practice	0	3	2	PEC	ELE301P
Total			22		
Semester 6					
Course Name	I	P	С	Category	Code
					0
Design for Quality and Reliability	2	0	2	DES	DES302T
Design for Quality and Reliability Product Management		0	2		
	2		2 3	DES	DES302T
Product Management	2	0	2 3 3	DES HMC	DES302T MAN303T
Product Management Embedded Systems	2 2 3	0 0 0 3	2 3 3 2	DES HMC PEC	DES302T MAN303T ELE323T
Product Management Embedded Systems Computer Architecture	2 2 3 3	0 0 0 3 3	2 3 3 2 2	DES HMC PEC PEC	DES302T MAN303T ELE323T COM307T
Product Management Embedded Systems Computer Architecture Computer Architecture Practice	2 2 3 3 0 0	0 0 0 3 3	2 3 3 2 2 2	DES HMC PEC PEC PEC	DES302T MAN303T ELE323T COM307T COM307P
Product Management Embedded Systems Computer Architecture Computer Architecture Practice Embedded Systems Practice	2 2 3 3 0 0	0 0 0 3 3	2 3 3 2 2 2 3	DES HMC PEC PEC PEC PEC	DES302T MAN303T ELE323T COM307T COM307P ELE323P
Product Management Embedded Systems Computer Architecture Computer Architecture Practice Embedded Systems Practice Product Design Practice	2 2 3 3 0 0	0 0 0 3 3	2 3 3 2 2 2	DES HMC PEC PEC PEC PEC PCD	DES302T MAN303T ELE323T COM307T COM307P ELE323P
Product Management Embedded Systems Computer Architecture Computer Architecture Practice Embedded Systems Practice Product Design Practice Elective – I	2 2 3 3 0 0 0 0 3	0 0 0 3 3 3	2 3 3 2 2 2 3	DES HMC PEC PEC PEC PEC PCD ELE	DES302T MAN303T ELE323T COM307T COM307P ELE323P
Product Management Embedded Systems Computer Architecture Computer Architecture Practice Embedded Systems Practice Product Design Practice Elective – I Elective – II Total Semester 7	2 2 3 3 0 0 0 0 3	0 0 0 3 3 3 0	2 3 3 2 2 2 2 3 3 2 2 2	DES HMC PEC PEC PEC PEC PCD ELE	DES302T MAN303T ELE323T COM307T COM307P ELE323P INT303
Product Management Embedded Systems Computer Architecture Computer Architecture Practice Embedded Systems Practice Product Design Practice Elective – I Elective – II Total Semester 7 Course Name	2 2 3 3 0 0 0 3 3	0 0 0 3 3 3	2 3 3 2 2 2 2 3 3 2 2 2 C	DES HMC PEC PEC PEC PEC PCD ELE ELE Category	DES302T MAN303T ELE323T COM307T COM307P ELE323P INT303 Code
Product Management Embedded Systems Computer Architecture Computer Architecture Practice Embedded Systems Practice Product Design Practice Elective – I Elective – II Total Semester 7 Course Name Internship	2 2 3 3 0 0 0 3 3 3	0 0 0 3 3 3 0 0	2 3 3 2 2 2 2 3 3 3 22 C	DES HMC PEC PEC PEC PEC PCD ELE ELE Category PCD	DES302T MAN303T ELE323T COM307T COM307P ELE323P INT303 Code INT404
Product Management Embedded Systems Computer Architecture Computer Architecture Practice Embedded Systems Practice Product Design Practice Elective – I Elective – II Total Semester 7 Course Name Internship Human Computer Interaction	2 2 3 3 0 0 0 0 3 3 3 1 1 1 1 1 1 1 1 1 1 1	0 0 0 3 3 3 0	2 3 3 2 2 2 2 3 3 22 C 5 3	DES HMC PEC PEC PEC PEC PCD ELE ELE Category PCD PCD	DES302T MAN303T ELE323T COM307T COM307P ELE323P INT303 Code
Product Management Embedded Systems Computer Architecture Computer Architecture Practice Embedded Systems Practice Product Design Practice Elective – I Elective – II Total Semester 7 Course Name Internship Human Computer Interaction Free Elective – I	2 3 3 0 0 0 0 3 3 3 3	0 0 0 3 3 3 0 0 0	2 3 3 2 2 2 3 3 22 C 5 3 3	DES HMC PEC PEC PEC PEC PCD ELE ELE Category PCD PEC ELE	DES302T MAN303T ELE323T COM307T COM307P ELE323P INT303 Code INT404 COM402T
Product Management Embedded Systems Computer Architecture Computer Architecture Practice Embedded Systems Practice Product Design Practice Elective – I Elective – II Total Semester 7 Course Name Internship Human Computer Interaction Free Elective – I Design Project	2 2 3 3 0 0 0 0 3 3 3 1 1 1 1 1 1 1 1 1 1 1	0 0 0 3 3 3 0 0	2 3 3 2 2 2 2 3 3 22 C 5 3 3 5	DES HMC PEC PEC PEC PEC PCD ELE ELE Category PCD PCD	DES302T MAN303T ELE323T COM307T COM307P ELE323P INT303 Code INT404
Product Management Embedded Systems Computer Architecture Computer Architecture Practice Embedded Systems Practice Product Design Practice Elective – I Elective – II Total Semester 7 Course Name Internship Human Computer Interaction Free Elective – I Design Project Total	2 3 3 0 0 0 0 3 3 3 3	0 0 0 3 3 3 0 0 0	2 3 3 2 2 2 3 3 22 C 5 3 3	DES HMC PEC PEC PEC PEC PCD ELE ELE Category PCD PEC ELE	DES302T MAN303T ELE323T COM307T COM307P ELE323P INT303 Code INT404 COM402T
Product Management Embedded Systems Computer Architecture Computer Architecture Practice Embedded Systems Practice Product Design Practice Elective – I Elective – II Total Semester 7 Course Name Internship Human Computer Interaction Free Elective – I Design Project Total Semester 8	2 3 3 0 0 0 0 3 3 3 1 0 0 0 0 0 3 3 0 0	0 0 3 3 3 0 0 0	2 3 3 2 2 2 3 3 22 C 5 3 3 5 16	DES HMC PEC PEC PEC PEC PCD ELE ELE Category PCD PEC ELE DES	DES302T MAN303T ELE323T COM307T COM307P ELE323P INT303 Code INT404 COM402T DES401
Product Management Embedded Systems Computer Architecture Computer Architecture Practice Embedded Systems Practice Product Design Practice Elective – I Elective – II Total Semester 7 Course Name Internship Human Computer Interaction Free Elective – I Design Project Total Semester 8 Course Name	2 2 3 3 0 0 0 0 3 3 3 3 3 3 3 3 3 3	0 0 3 3 3 0 0 0	2 3 3 2 2 2 3 3 22 C 5 3 3 5 16	DES HMC PEC PEC PEC PEC PCD ELE ELE ELE Category PCD PEC ELE DES Category	DES302T MAN303T ELE323T COM307T COM307P ELE323P INT303 Code INT404 COM402T
Product Management Embedded Systems Computer Architecture Computer Architecture Practice Embedded Systems Practice Product Design Practice Elective – I Elective – II Total Semester 7 Course Name Internship Human Computer Interaction Free Elective – I Design Project Total Semester 8 Course Name Elective – III	2 2 3 3 0 0 0 0 3 3 3 0	0 0 0 3 3 3 0 0 0	2 3 3 2 2 2 3 3 22 C 5 3 3 5 16	DES HMC PEC PEC PEC PEC PCD ELE ELE ELE Category PCD PEC ELE DES Category	DES302T MAN303T ELE323T COM307T COM307P ELE323P INT303 Code INT404 COM402T DES401
Product Management Embedded Systems Computer Architecture Computer Architecture Practice Embedded Systems Practice Product Design Practice Elective – I Elective – II Total Semester 7 Course Name Internship Human Computer Interaction Free Elective – I Design Project Total Semester 8 Course Name Elective – III Free Elective-II	2 2 3 3 0 0 0 3 3 3 0	0 0 3 3 3 0 0 0 0 6 P - 0 6	2 3 3 2 2 2 3 3 22 5 5 16	DES HMC PEC PEC PEC PEC PCD ELE ELE Category PCD PEC ELE DES Category	DES302T MAN303T ELE323T COM307T COM307P ELE323P INT303 Code INT404 COM402T DES401 Code
Product Management Embedded Systems Computer Architecture Computer Architecture Practice Embedded Systems Practice Product Design Practice Elective – I Elective – II Total Semester 7 Course Name Internship Human Computer Interaction Free Elective – I Design Project Total Semester 8 Course Name Elective – III Free Elective-II Innovation Management	2 2 3 3 0 0 0 3 3 3 0	0 0 0 3 3 3 0 0 0	2 3 3 2 2 2 3 3 22 5 16 C 3 3 3 2	DES HMC PEC PEC PEC PEC PCD ELE ELE ELE ODES Category PCD PEC ELE DES Category ELE DES	DES302T MAN303T ELE323T COM307T COM307P ELE323P INT303 Code INT404 COM402T DES401 Code MAN407T
Product Management Embedded Systems Computer Architecture Computer Architecture Practice Embedded Systems Practice Embedded Systems Practice Product Design Practice Elective – I Elective – II Total Semester 7 Course Name Internship Human Computer Interaction Free Elective – I Design Project Total Semester 8 Course Name Elective – III Free Elective-II	2 2 3 3 0 0 0 3 3 3 0	0 0 3 3 3 0 0 0 0 6 P - 0 6	2 3 3 2 2 2 3 3 22 5 5 16	DES HMC PEC PEC PEC PEC PCD ELE ELE Category PCD PEC ELE DES Category	DES302T MAN303T ELE323T COM307T COM307P ELE323P INT303 Code INT404 COM402T DES401 Code

^{*}Internship is for a period of 5 months