

**13. Courses of Study and Scheme of Assessment
BE COMPUTER SCIENCE AND ENGINEERING**

(2019 Regulations)

Course Code	Course Title	Periods / week			Maximum Marks					
		Lecture	Tutorial	Practical	Credits	CA	FE	Total	CAT	
SEMESTER VII										
19Z701	Cryptography	2	2	0	4	50	50	100	PC	
19	Open Elective II	3	0	0	3	50	50	100	OE	
19Z__	Professional Elective II	3	0	0	3	50	50	100	PE	
19Z__	Professional Elective III	3	0	0	3	50	50	100	PE	
19Z__	Professional Elective IV	3	0	0	3	50	50	100	PE	
19Z720	Project Work I	0	0	4	2	50	50	100	EEC	
Total 20 periods		14	2	4	18	300	300	600		
SEMESTER VIII										
19Z__	Professional Elective V	3	0	0	3	50	50	100	PE	
19Z__	Professional Elective VI	3	0	0	3	50	50	100	PE	
19Z820	Project Work II	0	0	8	4	50	50	100	EEC	
Total 14 periods		6	0	8	10	150	150	300		

CA Continuous Assessment

FE Final Examination

CAT - Category; BS - Basic Science; HS - Humanities and Social Sciences; ES - Engineering Sciences; PC - Professional Core; PE - Professional Elective; OE - Open Elective; EEC - Employability Enhancement Course; MC – Mandatory Course.

LANGUAGE ELECTIVES

- 19G001 Communication Skills for Engineers
- 19G002 German- Level A1.1
- 19G003 French Language Level 1
- 19G004 Basic Japanese

PROFESSIONAL ELECTIVES

- 19Z001 Approximation Algorithms
- 19Z002 Advanced Data Structures
- 19Z003 Big Data and Analytics
- 19Z004 Computer Graphics
- 19Z005 Computer Vision
- 19Z006 Deep Learning
- 19Z007 Information Retrieval
- 19Z008 Information Security
- 19Z009 Internet of Things
- 19Z010 Multicore Architecture
- 19Z011 Multi-Tier Computing
- 19Z012 Natural Language Processing
- 19Z013 Open Source Systems
- 19Z014 Parallel Programming
- 19Z015 Programming Paradigms
- 19Z016 Randomized Algorithms
- 19Z017 Semantic Web Technology
- 19Z018 Service Oriented Architecture
- 19Z019 Signal Processing
- 19Z020 Soft Computing
- 19Z021 Software Defined Networks
- 19Z022 Software Project Management
- 19Z023 Software Testing and Quality Assurance
- 19Z024 Storage Management
- 19Z025 Unix Internals
- 19Z026 User Interface Design
- 19Z027 XML and Web Services
- 19Z028 Wireless Networks
- 19Z029 Social and Economic Network Analysis

ONE-CREDIT COURSES

COMPUTER SCIENCE AND ENGINEERING

- 19ZF01 Game Programming
- 19ZF02 Design of Database Query Compiler
- 19ZF03 Test Automation using Open Source Tools
- 19ZF04 IoT for Telecommunication Systems
- 19ZF05 Openstack and Docker
- 19ZF06 Blockchain
- 19ZF07 Ethereum Development
- 19ZF08 Web Development and Configuration Management Using Python
- 19ZF09 Full Stack Development

ENGLISH

19GF01 Interpersonal and Organizational Communication

19GF02 Human Values Through Literature

HUMANITIES

19OFA1 Export – Import Practices

19OFA2 Insurance - Concepts and Practices

19OFA3 Public Finance

19OFA4 Public Finance and Taxation

Summary of Credit Distribution

BE COMPUTER SCIENCE AND ENGINEERING										
S. No	Course Category	Credits Per Semester								Total Credits
		1	2	3	4	5	6	7	8	
1	HS	3	2	3	0	0	0	0	0	8
2	BS	9	9	4	4	0	0	0	0	26
3	ES	9	11	4	0	0	0	0	0	24
4	PC	0	0	12	15	19	18	4	0	68
5	PE	0	0	0	0	0	3	9	6	18
6	OE	0	0	0	3	0	0	3	0	6
7	EEC	0	0+2 [£]	0	1	3	3	2	4	15
8	MC	-	-	-	-	-	-	-	-	-
	TOTAL	21	£ 22+2	23	23	22	24	18	10	165

£ Summer Term Course(s)

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