

## Computer Science and Engineering

### Courses Structure

#### Humanities and Social Sciences

**18 (15:0:3)**

	<b>L:T:P</b>	<b>Credits</b>
1. English	2:0:1	3
2. Professional Communication	1:0:2	3
3. Organizations	3:0:0	3
4. Economic Citizenship	3:0:0	3
5. Energy and Entropy	3:0:0	3
6. Complexity	3:0:0	3

#### Basic Sciences

**28 (21:4:3)**

	<b>L:T:P</b>	<b>Credits</b>
1. Engineering Physics	3:0:1	4
2. Engineering Chemistry	3:0:1	4
3. Problem Solving through Programming	3:0:1	4
4. Differential Equations	3:1:0	4
5. Statistics	3:1:0	4
6. Functions of Several Variables	3:1:0	4
7. Partial Differential Equations	3:1:0	4

#### Engineering Sciences

**26 (19:0:7)**

	<b>L:T:P</b>	<b>Credits</b>
1. Engineering Graphics with CAD	1:0:1	2
2. Workshop Practice	0:0:1	1
3. Engineering Materials	3:0:0	3
4. Measurements and Instrumentation	3:0:1	4
5. Ecology and Environment	3:0:1	4
6. Data Structures	3:0:1	4
7. Human-Computer Interface	3:0:1	4
8. Information Technology	3:0:1	4

**Professional Subject Core****54(45:0:9)**

	<b>L:T:P</b>	<b>Credits</b>
1. Theory of Computation	3:0:0	3
2. System Software	3:0:1	4
3. Networks – Principles & Design	3:0:1	4
4. Database – Principles & Design	3:0:1	4
5. Operating Systems: Use and Configuration	3:0:1	4
6. Operating Systems – Principles & Design	3:0:0	3
7. Object Oriented Programming	3:0:1	4
8. Design & Analysis of Algorithms	3:0:1	4
9. Computer Architecture & Organization	3:0:0	3
10. Platform Technologies	3:0:1	4
11. Software Engineering	3:0:0	3
12. Computer Graphics	3:0:1	4
13. Compilers	3:0:1	4
14. Artificial Intelligence	3:0:0	3
15. Parallel and Distributed Systems	3:0:0	3

**Professional Subject Electives****18 Credits**

	<b>L:T:P</b>	<b>Credits</b>
<b>Networking Stream</b>		
1. Network Protocol Stack Development	2:0:1	3
2. Device Drivers	2:0:1	3
3. File Systems	2:0:1	3
4. Network Security	3:0:0	3
5. Storage Networks		
<b>Distributed Computing Stream</b>		
1. High Performance Computing	3:0:0	3
2. Web Technologies	3:0:0	3
3. Distributed Systems	3:0:0	3
4. Virtualization	3:0:0	3
5. Grid Computing	3:0:0	3
6. Cloud Computing	3:0:0	3
7. Green Computing	3:0:0	3

**Open Electives**

	<b>L:T:P</b>	<b>Credits</b>
1. Data Structures	3:0:0	3
2. Social Networking	3:0:0	3
3. E-governance	3:0:0	3
4. E-commerce	3:0:0	3
5. Internet Engineering	3:0:0	3