

**Mahatma Gandhi University Revised Scheme For  
B Tech Syllabus Revision 2010 (Computer Science & Engineering)**

**Common for All Branches  
SCHEME S1&S2**

Code	Subject	Hours/week			Marks		End-sem duration- hours	Credits
		L	T	P/D	Internal	End-sem		
EN010 101	Engineering Mathematics I	2	1	-	50	100	3	5
EN010 102	Engineering Physics	1	1	-	50	100	3	4
EN010 103	Engineering Chemistry & Environmental Studies	1	1	-	50	100	3	4
EN010 104	Engineering Mechanics	3	1	-	50	100	3	6
EN010 105	Engineering Graphics	1	3	-	50	100	3	6
EN010 106	Basic Civil Engineering	1	1	-	50	100	3	4
EN010 107	Basic Mechanical Engineering	1	1	-	50	100	3	4
EN010 108	Basic Electrical Engineering	1	1	-	50	100	3	4
EN010 109	Basic Electronics Engg. & Information Technology	2	1	-	50	100	3	5
EN010 110	Mechanical Workshop	-	-	3	50	-	3	1
EN110 111	Electrical and Civil Workshops	-	-	3	100	-	3	1
	<b>Total</b>	<b>13</b>	<b>11</b>	<b>6</b>			<b>30</b>	<b>44</b>

**3<sup>rd</sup> Semester**

Code	Subject	Hours/week			Marks			
		L	T	P/D	Internal	End-sem		
EN010 301B	Engineering Mathematics II	2	2	-	50	100	3	4
EN010 302	Economics and Communication Skills	2	2	-	50	100	3	4 (3+1)
CS010 303	Problem Solving and Computer Programming	2	2	-	50	100	3	4
CS010 304	Computer Organization	3	1	-	50	100	3	4
CS010 305	Switching Theory and Logic Design	3	1	-	50	100	3	4
CS010 306(EC)	Electronics Devices and Circuits	3	1	-	50	100	3	4
CS010 307	Programming lab	-	-	3	50	100	3	2
CS010 308(EC)	Logic Design lab	-	-	3	50	100	3	2
	<b>Total</b>	<b>16</b>	<b>8</b>	<b>6</b>				<b>28</b>

**4<sup>th</sup> Semester**

Code	Subject	Hours/week			Marks		End- sem duration -hours	Cred its
		L	T	P/D	Inte- rnal	End- sem		
EN010 401	Engineering Mathematics III	2	2	-	50	100	3	4
CS010 402	Object Oriented Programming	3	1		50	100	3	4
CS010 403	Data Structures and Algorithms	2	2	-	50	100	3	4
CS010 404(EC)	Communication Systems	3	1	-	50	100	3	4
CS010 405	Microprocessor Systems	3	1	-	50	100	3	4
CS010 406	Theory of Computation	3	1	-	50	100	3	4
CS010 407	Data Structures lab	-	-	3	50	100	3	2
CS010 408(EC)	Electronic Circuits lab	-	-	3	50	100	3	2
	<b>Total</b>	<b>16</b>	<b>8</b>	<b>6</b>				<b>28</b>

**5<sup>th</sup> Semester**

Code	Subject	Hours/week			Marks		End- sem dura tion- hour s	Cred its
		L	T	P/D	Inte- rnal	End- sem		
EN010 501B	Engineering Mathematics IV	2	2	-	50	100	3	4
EN010 502(ME)	Principles of Management	3	1		50	100	3	4
CS010 503	Database Management Systems	2	2	-	50	100	3	4
CS010 504(EC)	Digital Signal Processing	3	1	-	50	100	3	4
CS010 505	Operating Systems	3	1	-	50	100	3	4
CS010 506	Advanced Microprocessors & Peripherals	3	1	-	50	100	3	4
CS010 507(P)	Database Lab	-	-	3	50	100	3	2
CS010 508(P)	Hardware & Microprocessors lab	-	-	3	50	100	3	2
	<b>Total</b>	<b>16</b>	<b>8</b>	<b>6</b>				<b>28</b>

## 6<sup>th</sup> Semester

Code	Subject	Hours/week			Marks		End-sem duration -hours	Credits
		L	T	P/D	Internal	End-sem		
CS010 601	Design and Analysis of Algorithms	2	2	-	50	100	3	4
CS010 602	Internet Computing	2	2	-	50	100	3	4
CS010 603	System Software	3	1	-	50	100	3	4
CS010 604	Computer Networks	3	1	-	50	100	3	4
CS010 605	Software Engineering	3	1	-	50	100	3	4
CS010 606Lxx	Elective I	2	2	-	50	100	3	4
CS010 607	Operating Systems Lab	-	-	3	50	100	3	2
CS010 608	Mini Project	-	-	3	50	100	3	2
	<b>Total</b>	<b>16</b>	<b>8</b>	<b>6</b>				<b>28</b>

### **Elective I**

CS010 606L01	Distributed Systems
CS010 606L02	Micro controller Based Systems
CS010 606L03	User Interface Design
CS010 606L04	Unix Shell Programming
CS010 606L05	Embedded Systems
CS010 606L06	Advanced Software Environments

## 7<sup>th</sup> Semester

Code	Subject	Hours/week			Marks		End-sem duration -hours	Credits
		L	T	P/D	Internal	End-sem		
CS010 701	Web Technologies	2	2	-	50	100	3	4
CS010 702	Compiler Construction	2	2	-	50	100	3	4
CS010 703	Computer Graphics	2	1	-	50	100	3	3
CS010 704	Object Oriented Modelling & Design	2	1	-	50	100	3	3
CS010 705	Principles of Programming Languages	2	1	-	50	100	3	3
CS010 706Lxx	Elective II	2	2	-	50	100	3	4
CS010 707	Systems Programming Lab	-	-	3	50	100	3	2
CS010 708	Networking lab	-	-	3	50	100	3	2
CS010 709	Seminar	-	-	2	50	-	-	2
CS010 710	Project	-	-	1	50	-	-	1
	<b>Total</b>	<b>12</b>	<b>9</b>	<b>9</b>				<b>28</b>

## Elective II

CS010 706L01	Real Time Systems
CS010 706L02	Data Mining and Data Warehousing
CS010 706L03	Operating System Kernel Design
CS010 706L04	Digital image processing
CS010 706L05	Data Processing and File Structures
CS010 706L06	Client Server and Applications

## 8<sup>th</sup> Semester

Code	Subject	Hours/week			Marks		End-sem duration-hours	Credits
		L	T	P/D	Internal	End-sem		
CS010 801	High Performance Computing	3	2	-	50	100	3	4
CS010 802	Artificial Intelligence	2	2	-	50	100	3	4
CS010 803	Security in Computing	2	2	-	50	100	3	4
CS010 804Lxx	Elective III	2	2	-	50	100	3	4
CS010 805Gxx	Elective IV	2	2	-	50	100	3	4
CS010 806	Computer Graphics Lab	-	-	3	50	100	-	2
CS010 807	Project	-	-	6	100	0	3	4
CS010 808	Viva Voce	-	-	-	-	50	-	2
	<b>Total</b>	<b>11</b>	<b>10</b>	<b>9</b>				<b>28</b>

## Elective III

CS010 804L01	E-commerce
CS010 804L02	Grid Computing
CS010 804L03	Biometrics
CS010 804L04	Optimization Techniques
CS010 804L05	Mobile Computing
CS010 804L06	Advanced Networking Trends

## Elective IV

CS010 805G01	Multimedia Techniques
CS010 805G02	Neural networks
CS010 805G03	Advanced Mathematics
CS010 805G04	Software Architecture
CS010 805G05	Natural Language Processing
CS010 805G06	Pattern Recognition