

**Dr. M.G.R. Educational & Research Institute
(Deemed University)
Maduravoyal, Chennai- 600 095.**

**B.Tech (Computer Science & Engineering)
PART TIME
(From 2010 Onwards)**

Entry Level Credit only for Diploma holders with industrial experience (48+27) Total: 75

List of subjects identified for the above course:

Semester No: 1

Theory:

Course Code NEW/OLD	Course Title	L	T	P	C
BCS201	Data Structures & Algorithms	3	1	0	4
BCS203	Object Oriented Programming	3	1	0	4
BMA213	Discrete Mathematics	3	1	0	4
BEC231	Electron devices and Circuits	3	1	0	4

Practicals:

BCS221	Data Structures Using C++	0	0	3	1
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Subtotal: 17

Semester No: 2

Theory:

Course Code	Course Title	L	T	P	C
BCS202	Data Base Management Systems	3	1	0	4
BCS204	Artificial Intelligence	3	0	0	3
BCS206	Computer Graphics & Multimedia	3	1	0	4
BMA309	Mathematical & Computational Tools using MATLAB	3	0	0	4

Practicals:

BCS222	DBMS Lab	0	0	3	1
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Subtotal: 16

Semester No: 3**Theory:**

Course Code	Course Title	L	T	P	C
BEC234	Digital Electronics	3	0	0	3
BEC333	Microprocessor and Applications	3	1	0	4
BCS303	Computer Architecture	3	1	0	4
BCS405	Object Oriented System Analysis and Design	3	0	0	3

Practicals:

BEC244	Digital Electronics Lab	0	0	3	1
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Sub Total: 15**Semester No: 4****Theory:**

Course Code	Course Title	L	T	P	C
BCS305	Advanced Java Programming	3	0	0	3
BCS307	Operating Systems	3	0	0	3
BCS309	Software Engineering	3	0	0	3
BEC304	Fundamentals of Digital Signal Processing	3	1	0	4

Practicals:

BCS321	Operating Systems Lab	0	0	3	1
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Sub Total: 14**Semester No: 5****Theory:**

Course Code	Course Title	L	T	P	C
BCS302	Computer Networks	3	0	0	3
BCS301	System Software	3	1	0	4
BCS306	Web Technology	3	0	0	3
BCSE11/BCSE21/ BCSE31/BCSE41/ BCSE51/BCSE61/ BCSE71/BCSE81/ BCSE91/BCSEA1/ BCSEB1/BCSEC1/ BCSED1	Elective I	3	0	0	3

Practicals:

BCS322	Network Programming Lab	0	0	3	1
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SubTotal: 14

Semester No: 6**Theory:**

Course Code	Course Title	L	T	P	C
BCS407	Data Mining and Data Warehousing	3	0	0	3
BCSE12/BCSE22/BCSE32/BCSE42 /BCSE52/BCSE62/BCSE72/BCSE82 /BCSE92/BCSEA2/BCSEB2/ BCSEC2/BCSED2	Elective II	3	0	0	3
BCSE13/BCSE23/BCSE33/BCSE43/ BCSE53/BCSE63/BCSE73/BCSE83 /BCSE93/BCSEA3/BCSEB3/BCSEC3/ BCSED3	Elective III	3	0	0	3
BCS304	Principles of compiler Design	3	0	0	3

Practicals:

BCS324	System Software and Compiler Design Lab	0	0	3	1
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SubTotal: 13**Semester No: 7****Theory:**

Course Code	COURSE TITLE	L	T	P	C
BMG402	Entrepreneurship Development	3	0	0	3
BCS403	. Net Framework	3	0	0	3
BCS422	PROJECT	0	0	18	9

Practical:

BCS421	.Net Lab	0	0	3	1
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Subtotal: 16**Credits from 1st semester to 7th sem: 105****Entry Credit: 75
Total Credits: 180**

List of Elective: B.Tech (CSE) ELECTIVES**I. DATABASE SPECIALISATION**

Old Course Code	New Course Code	Course Title	L	T	P	C
BCSE11		DATABASE TUNING	3	0	0	3
BCSE12		ADVANCED KNOWLEDGE MANAGEMENT	3	0	0	3
BCSE13		INFOMETRICS	3	0	0	3

II. NETWORKING SPECIALISATION

Old Course Code	New Course Code	Course Title	L	T	P	C
BCSE21		HIGH SPEED NETWORKS	3	0	0	3
BCSE22		TCP/IP DESIGN AND IMPLEMENTATION	3	0	0	3
BCSE23		AD-HOC NETWORKS	3	0	0	3

III. JAVA AND WEB SPECIALISATION

Old Course Code	New Course Code	Course Title	L	T	P	C
BCSE31		JAVA VIRTUAL MACHINE	3	0	0	3
BCSE32		XML & WEB SERVICES	3	0	0	3
BCSE33		SERVER SIDE PROGRAMMING USING JAVA	3	0	0	3

IV. DOMAIN SPECIALISATIONS

Old Course Code	New Course Code	Course Title	L	T	P	C
BCSE41		J2ME	3	0	0	3
BCSE42		SAP (ERP)	3	0	0	3
BCSE43		ECRM	3	0	0	3

V. VLSI & EMBEDDED SPECIALISATION

Old Course Code	New Course Code	Course Title	L	T	P	C
BCSE51		VLSI TECHNOLOGY	3	0	0	3
BCSE52		SYSTEM MODELING USING HARDWARE DESCRIPTION LANGUAGES	3	0	0	3
BCSE53		VLSI DESIGN	3	0	0	3

VI. BIOINFORMATICS SPECIALISATION

Old Course Code	New Course Code	Course Title	L	T	P	C
BCSE61		BASIC BIOLOGY	3	0	0	3
BCSE62		BIOLOGICAL DATABASES AND DATA ANALYSIS	3	0	0	3
BCSE63		CELL BIOLOGY AND GENETICS	3	0	0	3

VII. DIGITAL IMAGE PROCESSING SPECIALISATION

Old Course Code	New Course Code	Course Title	L	T	P	C
BCSE71		DIGITAL IMAGE PROCESSING	3	0	0	3
BCSE72		PATTERN RECOGNITION	3	0	0	3
BCSE73		MEDICAL IMAGING TECHNIQUES	3	0	0	3

VIII. RESEARCH SPECIALISATION

Old Course Code	New Course Code	Course Title	L	T	P	C
BCSE81		SOFTWARE AGENTS	3	0	0	3
BCSE82		FUZZY SET THEORY AND APPLICATIONS	3	0	0	3
BCSE83		PARALLEL ALGORITHMS	3	0	0	3

IX. SOFTWARE ENGINEERING SPECIALISATION

Old Course Code	New Course Code	Course Title	L	T	P	C
BCSE91		SOFTWARE ARCHITECTURE	3	0	0	3
BCSE92		SOFTWARE DESIGN	3	0	0	3
*BCSE93		SOFTWARE QUALITY AND TESTING	3	0	0	3

*BCSE93 is the equivalent of BCS401 offered as per the previous syllabus

X. OS SPECIALISATION

Old Course Code	New Course Code	Course Title	L	T	P	C
BCSEA1		UNIX INTERNALS	3	0	0	3
BCSEA2		DISTRIBUTED COMPUTING	3	0	0	3
BCSEA3		REAL TIME SYSTEM DESIGN	3	0	0	3

XI.COMPUTATIONAL THEORY SPECIALISATION

Old Course Code	New Course Code	Course Title	L	T	P	C
BCSEB1		DESIGN OF ALGORITHMS	3	0	0	3
BCSEB2		NUMERICAL & STATISTICAL METHODS	3	0	0	3
BCSEB3		THEORY OF COMPUTATION	3	0	0	3

XII.HARDWARE SPECIALISATION

Old Course Code	New Course Code	Course Title	L	T	P	C
BCSEC1		HIGH PERFORMANCE MICROPROCESSOR	3	0	0	3
BCSEC2		COMPUTER PERIPHERALS AND INTERFACING	3	0	0	3
BCSEC3		ROBOTICS	3	0	0	3

XIII.MIS SPECIALISATION

Old Course Code	New Course Code	Course Title	L	T	P	C
BCSED1		DECISION SUPPORT SYSTEM	3	0	0	3
BCSED2		MANAGEMENT INFORMATION SYSTEMS	3	0	0	3
BCSED3		MAINFRAME COMPUTING	3	0	0	3

For syllabus refer B.Tech (Full Time)