

**PG DEPARTMENT OF COMPUTER SCIENCE  
B.SC. COMPUTER SCIENCE(HONOURS) PROGRAMME  
COURSE STRUCTURE**

**SEMESTER 1**

Sl. No	Course Code	Course Description
1	CSC1CJ101	Major Course 1 - Fundamentals of Computers & Computational Thinking
2	MAT1MN105	Minor Course 1 ( Matrix Theory)
3	ELE1MN101	Minor Course 2 (Electronic Fundamentals)
4	ENG1FA101 (2)	Ability Enhancement Course 1 (English Language Skills for Sciences)
5	FRE1FA102 (2) HIN1FA102(2) MAL 1FA102(2)	Ability Enhancement Course 2 (Communicative French I) (Communication and Creative Writing in Hindi language -Part I) (Literary Appreciation )
6	XXX1FM105	Multi-Disciplinary Course 1

**SEMESTER 2**

Sl. No	Course Code	Course Description
1	CSC2CJ101	Major Course 2 - Fundamentals of Programming (C Language)
2	MAT2MN105	Minor Course 3 (Vector Spaces and Linear Transformations )
3	ELE2MN101	Minor Course 4 (Fundamentals of Digital Electronics)
4	ENG2FA103 (2)	Ability Enhancement Course 3 ( Advance English Language Skills for Sciences )
5	FRE2FA104 (2) HIN2FA104(2) MAL2FA104(2)	Ability Enhancement Course 4 (Communicative French II) (Communication and Creative Writing in Hindi language -Part II) (Communicative Malayalam and Science Writing )
6	XXX2FM106	Multi-Disciplinary Course 2



### SEMESTER 3

Sl. No	Course Code	Course Description
1	CSC3CJ201	Major Course 3 - Software Project Management
2	CSC3CJ202	Major Course 4 - Data Structures and Algorithm
3	MAT3MN205	Minor Course 5 (Optimization Techniques)
4	ELEMN201	Minor Course 6 (Arduino coding with embedded C)
5	XXX3FM107 (2)	Multi-Disciplinary Course 3 – Kerala Knowledge System (English Department)
6	ENG3FV108 (2)	Value-Added Course 1

### SEMESTER 4

Sl. No	Course Code	Course Description
1	CSC4CJ203	Major Course 5 - Database Management System
2	CSC4CJ204	Major Course 6 - Python Programming
3	CSC4CJ205	Major Course 7 - Computer Networks
4	ENG4FV109 (2)	Value-Added Course 2
5	XXX4FV110(2)	Value-Added Course 3
6	ENG4FS111 (2)	Skill Enhancement Course – 1 (P)

### SEMESTER 5

Sl. No	Course Code	Course Description
1	CSC5CJ301	Major Course 8 - Data Mining
2	CSC5CJ302	Major Course 9 - Object Oriented Programming (Java)
3	CSC5CJ303	Major Course 10 - Full Stack Web Development
4	CSC5EJ305	Elective Course 1 in Major 11
5	CSC5EJ306	Elective Course 2 in Major 12
6	CSC5FS112	Skill Enhancement Course 2 - Introduction to Digital Marketing



## SEMESTER 6

Sl. No	Course Code	Course Description
1	CSC6CJ304	Major Course 13 - Digital Electronics and Computer Architecture
2	CSC6CJ305	Major Course 14 - Principles of Operating Systems
3	CSC6CJ306	Major Course 15 - Introduction to Artificial Intelligence & Machine Learning
4	CSC6CJ311	Elective Course 3 in Major 16
5	CSC6CJ312	Elective Course 4 in Major 17
6	CSC6FS113	Skill Enhancement Course 3 - Project Implementation
7	CSC6CJ349	Internship in Major (Credit for internship to be awarded only at the end of Semester 6)

## SEMESTER 7

Sl. No	Course Code	Course Description
1	CSC7CJ401	Major Course 18 - Theory of Computation
2	CSC7CJ402	Major Course 19 - System Security
3	CSC7CJ403	Major Course 20 - Advanced Data Structures and Algorithms
4	CSC7CJ404	Major Course 21 - Block Chain Technology
5	CSC7CJ405	Major Course 22 - Internet of Things

## SEMESTER 8

Sl. No.	Course Code	Course Description
1	CSC8CJ406	Major Course 23 - Compiler Design
2	CSC8CJ407	Major Course 24 - Client-Server Architecture
3	CSC8CJ408	Major Course 25 - Parallel Computing
<b>OR (instead of Core Courses CSC8CJ406, CSC8CJ407 and CSC8CJ408 in Major)</b>		
1	CSC8CJ449**	Project (in Honours programme)
2	CSC8CJ499**	Research Project (in Honours with Research programme)

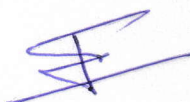
3	CSC8EJXXX*	Elective Course 5 in Major / Minor Course 7
4	CSC8EJXXX*	Elective Course 6 in Major /Minor Course 8
5	CSCEJXXX*	Elective Course 7 in Major / Minor Course 9 / Major Course in any Other Discipline
<b>OR (instead of Elective Course 7 in Major, in the case of Honours with Research Programme)</b>		
1	CSC8CJ489	Research Methodology



Prepared by

Mr. Jayakrishnan S

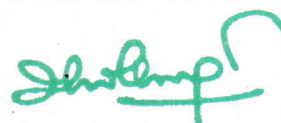
HoD



Verified by

Mr. Jayakrishnan S

Nodal Officer, FYUGP



Approved by

Rev Fr Dr Paulachan K J

Principal

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