

**M.Sc. COMPUTER SCIENCE****M.Sc. Computer Science Part - I (600 Marks)****Semester - I : Theory Courses and Practical Laboratory Courses**

Course Code	Subjects	Theory	Internal	Practical	Total
PSCS101	Analysis of Algorithms and Researching Computing	60	40	PSCSP101 (PSCS101 and PSCS102)	100
PSCS102	Advance Networking Concepts	60	40		100
PSCS103	Advance Database Systems	60	40	PSCSP102 (PSCS103 and PSCS104)	100
PSCS104	Robotics and Artificial Intelligence	60	40		100

Semester - II : Theory Courses and Practical Laboratory Courses

Course Code	Subjects	Theory	Internal	Practical	Total
PSCS201	Advanced Operating Systems	60	40	PSCSP201 (PSCS201 and PSCS202)	100
PSCS202	Design and implementation of Modern Compilers	60	40		100
PSCS2031	Elective I - Track A : Cloud Computing (Concepts and Design of Web Services)	60	40	PSCSP202 Elective I and Elective II	100
PSCS2032	Elective I - Track B : Cyber and Information Security (Network Security)	60	40		100
PSCS2041	Elective II - Track C : Business Intelligence and Big Data Analytics (Business Intelligence)	60	40		100
PSCS2042	Elective II - Track D : Machine Intelligence Fundamentals of Machine Intelligence	60	40		100



M.Sc. Computer Science Part - II

Semester - III : Theory Courses and Practical Laboratory Courses

Course Code	Subjects	Theory	Internal	Practical	Total
PSCS301	Ubiquitous Computing	60	40	PSCSP5 (PSCS301 and PSCS302)	100
PSCS302	Social Network Analysis	60	40		100
PSCS3031	Elective I - Track A : Cloud Computing - II (Cloud Computing Technologies)	60	40	PSCSP6 Elective I and Elective II	100
PSCS3032	Elective I - Track B : Cyber and Information Security - II (Cyber Forensics)	60	40		100
PSCS3033	Elective II - Track C : Business Intelligence and Big Data Analytics - II (Mining Massive Data Sets)	60	40		100
PSCS3034	Elective II - Track D : Machine Learning - II (Advanced Machine Learning)	60	40		100

Semester - IV : Theory Courses

Course Code	Subjects	Theory	Internal	Practical	Total
PSCS401	Simulation and Modeling	60	40	PSCSP7 (Simulation & Modeling and Specialization)	100
PSCS4021	Specialization - Track A : Cloud Computing - III (Building Clouds & Services)	60	40		100
PSCS4022	Specialization - Track B : Cyber and Information Security - II (Cryptography and Crypt Analysis)	60	40		100
PSCS4023	Specialization - Track C : Business Intelligence and Big Data Analytics - III (Intelligent Data Analysis)	60	40		100
PSCS4024	Specialization - Track D : Machine Learning - III (Computational Intelligence)	60	40		100



A student is expected to continue with the same track he or she has taken in semester - II for elective - I and elective - II. Each of these theory courses (compulsory as well as elective)

Semester - IV : Internship

Course Code	Course Title	No. of Hours	Credits
PSCSP8	Internship with Industry	300	06

Semester - IV : Project Implementation

Course Code	Course Title	No. of Hours	Credits
PSCSP9	Project Implementation	200	06

Examination Scheme :

The Internal Examination based on the tests and presentations are of 40 marks in each paper. The final University Examination shall be of 2.30 hours duration for each theory papers of 60 marks and 2 hours duration for each practical papers of 50 marks. To pass the M.Sc. Examination a candidate must obtain a minimum of 40% of the marks allotted to each paper (Internal, Theory and Practical Examination)

Eligibility : The candidate must have passed the B.Sc. degree examination with the following combination of subjects :

B.Sc. (Computer Science) / BCS / B.Sc. (IT) OR

Mathematics OR

Physic + Mathematics (4 Units) OR

Statistics + Mathematics (4 Units) OR

Bachelor of Engineering (B.E.) in CS / IT