

Course Structure of B.Sc. (Mathematics, Physics, Computer Science)

B.Sc. MPCS									
Semester	Nature of the Course	Subject Name	Subject Code	Credit Points	CIA Total Marks	ESE Total Marks	ESE Pass Marks	Total Marks	Pass Marks
I	Mandatory : Language Course -I	English- I	ENG101	4	30	70	28	100	40
	Choice Based: Language course -II *	Second Language- I	ARA101	4	30	70	28	100	40
			FRE101	4	30	70	28	100	40
			HIN101	4	30	70	28	100	40
			SAN101	4	30	70	28	100	40
			TEL101	4	30	70	28	100	40
	Choice Based : Core courses	Mathematics- I: Differential Equations	MAT101	4	30	70	28	100	40
		Mathematics Pr- I: Differential Equations	MAT111	1	15	35	14	50	20
		Physics- I: Mechanics and Oscillations	PHY101	4	30	70	28	100	40
		Physics Pr- I: Mechanics and Oscillations Lab	PHY111	1	15	35	14	50	20
		Computer Science- I: Programming in C	CSC101	4	30	70	28	100	40
		Computer Science Pr- I: Programming in C	CSC111	1	15	35	14	50	20

	Mandatory: Ability Enhancement Compulsory Course-I	Gender Sensitization	AECC101B	2	15	35	14	50	20
	Choice Based : Skill Oriented Course	Open Elective* : Any one from the List	SOC101	2	15	35	14	50	20
II	Mandatory : Language Course -I	English- II	ENG202	4	30	70	28	100	40
	Choice Based :Language course -II *	Second Language- II	ARA202	4	30	70	28	100	40
			FRE202	4	30	70	28	100	40
			HIN202	4	30	70	28	100	40
			SAN202	4	30	70	28	100	40
			TEL202	4	30	70	28	100	40
	Choice Based : Core courses	Mathematics- II: Differential and Integral Calculus	MAT202	4	30	70	28	100	40
		Mathematics Pr- II: Differential and Integral Calculus	MAT212	1	15	35	14	50	20
		Physics- II: Thermal Physics	PHY202	4	30	70	28	100	40
		Physics Pr- II: Thermal Physics Lab	PHY212	1	15	35	14	50	20
		Computer Science- II: Programming with C++	CSC202	4	30	70	28	100	40
		Computer Science Pr- II: Programming with C++	CSC212	1	15	35	14	50	20

	Mandatory: Ability Enhancement Compulsory Course-II	Environmental Science	AECC202A	2	15	35	14	50	20
	Choice Based : Co-Curricular Activity	Open Elective* : Any one from the List	CCA601	2	15	35	14	50	20
III	Mandatory : Language Course -I	English- III	ENG303	3	30	70	28	100	40
	Choice Based :Language course -II *	Second Language- III	ARA303	3	30	70	28	100	40
			FRE303	3	30	70	28	100	40
			HIN303	3	30	70	28	100	40
			SAN303	3	30	70	28	100	40
			TEL303	3	30	70	28	100	40
	Choice Based : Core courses	Mathematics- III: Algebra	MAT303	4	30	70	28	100	40
		Mathematics Pr- III: Algebra	MAT313	1	15	35	14	50	20
		Physics- III: Waves and Optics	PHY303	4	30	70	28	100	40
		Physics Pr- III: Waves and Optics Lab	PHY313	1	15	35	14	50	20
		Computer Science- III: Implementing Data Structures using C++	CSC303	4	30	70	28	100	40

		Computer Science Pr- III: Implementing Data Structures using C++	CSC313	1	15	35	14	50	20
	Choice Based : Institutional Specific Skill Enhancement Course-I	Communication Skills	SEC301A	2	15	35	14	50	20
	Choice Based : Department Specific Skill Enhancement Course-I	Open Elective* : Any one from the List	SEC302	2	15	35	14	50	20
IV	Mandatory : Language Course -I	English- IV	ENG404	3	30	70	28	100	40
	Choice Based: Language course -II *	Second Language-IV	ARA404	3	30	70	28	100	40
			FRE404	3	30	70	28	100	40
			HIN404	3	30	70	28	100	40
			SAN404	3	30	70	28	100	40
			TEL404	3	30	70	28	100	40
	Choice Based : Core courses	Mathematics- IV: Real Analysis	MAT404	3	30	70	28	100	40
		Mathematics Pr- IV: Real Analysis	MAT414	3	30	70	28	100	40
		Physics- IV: Electromagnetic Theory	PHY404	3	30	70	28	100	40

		Physics Pr- IV: Electromagnetic Theory Lab	PHY414	3	30	70	28	100	40
		Computer Science- IV: Data Base Management Systems	CSC404	3	30	70	28	100	40
		Computer Science Pr- IV: Data Base Management Systems	CSC414	3	30	70	28	100	40
	Choice Based : Institutional Specific Skill Enhancement Course-II	Universal Human Values	SEC403B	2	15	35	14	50	20
	Choice Based : Department Specific Skill Enhancement Course-II	Open Elective* : Second course from the List	SECE404	2	15	35	14	50	20
V	Mandatory : Language Course -I	English- V	ENG505	3	30	70	28	100	40
	Choice Based: Language course -II *	Second Language-V	ARA505	3	30	70	28	100	40
			FRE505	3	30	70	28	100	40
			HIN505	3	30	70	28	100	40
			SAN505	3	30	70	28	100	40
			TEL505	3	30	70	28	100	40
	Choice Based : Core courses	Mathematics- V: Linear Algebra	MAT505	4	30	70	28	100	40

		Mathematics- Pr- V: Linear Algebra	MAT515	1	15	35	14	50	20
		Physics- V: Modern Physics	PHY505	4	30	70	28	100	40
		Physics Pr- V: Modern Physics Lab	PHY515	1	15	35	14	50	20
		Computer Science- V: Programming in JAVA	CSC505	4	30	70	28	100	40
		Computer Science Pr- V: Programming in JAVA	CSC515	1	15	35	14	50	20
	Choice Based : Generic Elective Course	Inter Disciplinary Elective* : Any one from the List	GE501	4	30	70	28	100	40
	Mandatory: Ability Enhancement Compulsory Course-III	Capacity Building	AECC603	2	15	35	14	50	20
VI	Mandatory : Language Course -I	English- VI	ENG606	3	30	70	28	100	40
	Choice Based: Language course -II *	Second Language-VI	ARA606	3	30	70	28	100	40
			FRE606	3	30	70	28	100	40
			HIN606	3	30	70	28	100	40
			SAN606	3	30	70	28	100	40
			TEL606	3	30	70	28	100	40

	Choice Based : Core courses	Mathematics-VI: Numerical Analysis	MAT606	4	30	70	28	100	40
		Mathematics Pr-VI: Numerical Analysis	MAT616	1	15	35	14	50	20
		Physics-VI: Basic Electronics	PHY606	4	30	70	28	100	40
		Physics Pr-VI: Basic Electronics Lab	PHY616	1	15	35	14	50	20
		Computer Science-VI: Web Technologies	CSC606	4	30	70	28	100	40
		Computer Science Pr-VI: Web Technologies	CSC616	1	15	35	14	50	20
	Choice Based: Project/ Internship/Core Elective* Any one from the core discipline	Mathematics	DSE607	4	30	70	28	100	40
		Physics	DSE607	4	30	70	28	100	40
		Computer Science	DSE607	4	30	70	28	100	40