



BENGAL COLLEGE OF ENGINEERING & TECHNOLOGY

Shahid Sukumar Banerjee Sarani, Bidhan Nagar
Durgapur-713212 West Bengal, India
Department of Computer Science Engineering

CO WITH PO & PSO MAPPING FOR ALL SUBJECTS

(SEMESTER-I)

Course Title: Mathematics –IA	Code: BS-M101
Type of Course: Theory	Course Designation: Compulsory
Semester: 1st	Contact Hours: 3L+1T/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	3	3	3	3	-	-	-	-	-	-	3	3	1	3
CO2	3	3	3	3	-	-	-	-	-	-	3	2	-	3
CO3	3	3	3	2	-	-	-	-	-	-	3	2	2	3
CO4	3	1	2	1	-	-	-	-	-	1	3	2	2	3
CO5	2	2	2	2	-	-	-	-	-	2	3	1	1	3
AVG.	2.8	2.4	2.6	2.2	0	0	0	0	0	1.5	3	2	1.5	3

Course Title: Physics-I	Code: BS-PH101
Type of Course: Theory	Course Designation: Compulsory
Semester: 1st	Contact Hours: 3L+1T/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
--	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------

CO1	3	2	1	-	-	-	-	-	-	-	-	2	2	2
CO2	1	3	2	-	-	-	-	-	-	-	-	-	2	1
CO3	3	2	1	1	-	-	-	-	-	-	-	3	-	1
CO4	1	3	2	-	-	-	-	-	-	-	-	3	1	2
CO5	1	3	2	0	-	-	-	-	-	-	-	3	2	3
AVG.	1.8	2.6	1.6	1	0	0	0	0	0	0	0	2.75	1.75	1.8

Course Title: Basic Electrical Engineering	Code: ES-EE101
Type Of Course: Theory	Course Designation: Compulsory
Semester: 1st	Contact Hours: 3L+1T/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Course Title: Physics-I Laboratory	Code: BS-PH191
Type of Course: Practical	Course Designation: Compulsory
Semester: 1st	Contact Hours: 3P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Writer: Course Coordinator	

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO 11	PS O1	PS O2	Ps o3
CO1	3	2	-	-	2	-	-	-	-	-	-	2	2	2
CO2	2	3	3	2	2	-	-	-	-	-	-	1	2	2
CO3	2	-	3	1	-	-	-	-	-	-	1	3	1	2
CO4	2	-	2	2	3	-	-	-	-	-	2	3	2	1
CO5	2	2	-	2	3	-	-	-	-	-	1	3	3	
AVG	2.2	2.34	2.67	1.75	2.5	0	0	0	0	0	1.34	2.4	2	1.75

Mapping of COs with POs and PSOs (Course Articulation Matrix):

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	2	3	1	1	-	-	-	-	-	-	-	2	2	2
CO2	2	3	1	1	-	-	-	-	-	-	-	2	2	2
CO3	2	2	3	1	-	-	-	-	-	-	-	3	3	1
CO4	2	3	1	2	-	-	-	-	-	-	-	2	1	1
CO5	2	2	3	1	-	-	-	-	-	-	-	3	3	1
AVG.	2	2.6	1.8	1.2	0	0	0	0	0	0	0	2.4	2.2	1.4

Course Title: Basic Electrical Engineering Lab	Code: ES-EE191
---	-----------------------

Type of Course: Practical	Course Designation: Compulsory
Semester: 1st	Contact Hours: 2P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	2	-	-	-	3	-	-	2	-	-	-	3	2	1
CO2	2	3	3	1	2	-	-	3	-	-	-	2	1	2
CO3	2	2	3	-	-	-	-	2	-	-	-	3	2	1
CO4	2	-	2	-	3	-	-	3	-	-	-	3	2	3
CO5	1	-	-	-	1	-	-	-	-	-	-	1	2	2
AVG.	1.8	2.5	2.67	1	2.25	0	0	2.5	0	0	0	2.4	1.8	1.8

Course Title: Workshop	Code: ES-ME192
Type Of Course: Practical	Course Designation: Compulsory
Semester: 1st	Contact Hours: 1L+4P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Writer: Course Coordinator	

Course Title: Programming for Problem Solving	Code: ES-CS201
Type of Course: Theory	Course Designation: Compulsory
Semester: 2nd	Contact Hours: 3L+1T/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	1	-	-	-	-	-	-	-	-	-	-	2	2	2
CO2	1	-	-	-	-	1	1	-	-	-	-	1	2	2
CO3	1	-	-	-	-	1	1	1	-	-	-	3	1	2
CO4	1	-	-	-	-	-	-	2	1	1	-	3	1	1
CO5	1	-	-	-	-	-	-	2	1	1	1	3	2	2
AVG.	1	0	0	0	0	1	1	1.67	1	1	1	2.4	1.6	1

(SEMESTER-II)

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	3	3	3	2	1	1	1	1	2	2	3	3	3
CO2	3	3	3	3	-	1	1	1	1	2	2	3	2	3

CO3	3	3	3	3	-	-	-	1	1	-	2	3	2	3
CO4	3	3	3	3	-	-	-	1	1	-	2	3	3	2
CO5	3	3	3	3	-	-	-	1	1	-	2	3	3	3
AVG.	3	3	3	3	2	1	1	1	1	2	2	3	2.6	2.8

Course Title: Chemistry I	Code: BS-CH 201
Type of Course: Theory	Course Designation: Compulsory
Semester: 2 nd	Contact Hours: 3L+1T/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Course Title:Mathematics –IIA								Code: BS-M201						
Type of Course: Theory								Course Designation: Compulsory						
Semester: 2 nd								Contact Hours: 3L+1T/week						
Continuous Assessment: 25 Marks								Final Exam: 70 Marks						
PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	
CO1	2	2	3	1	-	-	-	-	-	3	1	2	2	
CO2	2	2	3	1	-	-	-	-	-	3	2	2	2	
CO3	3	3	3	1	-	-	-	-	-	3	1	2	2	
CO4	3	2	3	2	-	-	-	-	-	1	3	3	1	1
CO5	3	2	3	2	-	-	-	-	-	2	3	3	1	1
AVG.	2.8	2.2	3	1.4	0	0	0	0	0	1.5	3	2	1.6	1.6

Mapping of COs with POs and PSOs (Course Articulation Matrix):

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	2	1	1	-	-	-	-	-	-	-	3	2	2
CO2	3	2	1	-	-	-	-	-	-	-	-	3	3	3
CO3	3	2	1	1	-	-	-	-	-	-	-	3	1	1
CO4	3	2	1	1	-	-	-	-	-	-	-	3	2	2
CO5	3	1	1	-	-	-	-	-	-	-	-	3	1	1
AVG.	3	1.8	1	1	0	0	0	0	0	0	0	3	1.8	1.8

Course Title: English	Code: HM-HU201
Type of Course: Theory	Course Designation: Compulsory
Semester: 2 nd	Contact Hours: 2L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	2	2	2	2	2	2	2	-	3	-	2	3	3	1
CO2	2	2	2	2	2	2	2	-	3	-	2	3	3	2
CO3	2	2	2	2	2	2	2	-	3	-	2	3	3	1
CO4	2	2	2	2	2	2	2	-	3	-	2	3	3	2
CO5	2	2	2	2	2	2	2	-	3	-	2	3	3	2
AVG	2	2	2	2	2	2	2	0	3	0	2	3	3	1.6

Course Title: Chemistry-I Laboratory	Code: BS-CH291
Type of Course: Practical	Course Designation: Compulsory
Semester: 2 nd	Contact Hours: 3P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	1	1	2	3	-	-	-	-	-	-	-	3	2	3
CO2	1	1	2	3	-	-	-	-	-	-	-	3	2	3
CO3	1	1	2	3	-	-	-	-	-	-	-	3	1	3
CO4	1	2	2	3	-	-	-	-	-	-	-	3	2	3
CO5	1	2	2	3	-	-	-	-	-	-	-	3	2	3
AVG.	1	1.4	2	3	0	0	0	0	0	0	0	3	1.8	3

Course Title: Programming for ProblemSolving	Code: ES-CS291
Type of Course: Practical	Course Designation: Compulsory
Semester: 2 nd	Contact Hours: 4P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	2	2	2	2	-	-	-	-	-	-	2	3	3	3
CO2	2	2	2	2	-	-	-	-	-	-	2	3	3	3
CO3	2	2	2	2	-	-	-	-	-	-	2	3	3	3
CO4	2	2	2	2	-	-	-	-	-	-	2	3	3	3

CO5	2	2	2	2	-	-	-	-	-	-	2	3	3	3
AVG	2	2	2	2	0	0	0	0	0	0	2	3	3	3

Course Title: Engineering Graphics & Design	Code: ES-ME291
Type of Course: Practical	Course Designation: Compulsory
Semester: 2 nd	Contact Hours: 1L+4P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	1	2	-	-	-	-	-	-	-	-	-	3	3	1
CO2	1	-	-	-	-	1	1	-	-	-	-	3	3	1
CO3	1	1	-	-	-	1	1	1	-	-	-	3	3	2
CO4	1	-	-	-	-	1	-	2	1	1	-	3	3	2
CO5	1	2	-	-	-	-	-	2	1	1	1	3	3	2
AVG.	1	1.67	0	0	0	1	1	1.67	1	1	1	3	3	1.6

Course Title: Language Laboratory	Code: HM-HU291
Type of Course: Practical	Course Designation: Compulsory
Semester: 2 nd	Contact Hours: 2P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Writer: Course Coordinator	

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	2	2	2	2	2	2	2	1	3	-	2	2	2	3
CO2	2	2	2	2	2	2	2	1	3	-	2	2	3	2
CO3	2	2	2	2	2	2	2	1	3	-	2	3	2	2
CO4	2	2	2	2	2	2	2	1	3	-	2	3	3	2
CO5	2	2	2	2	2	2	2	1	3	-	2	1	3	2
AVG.	2	2	2	2	2	2	2	1	3	0	2	2.2	2.6	2.2

(SEMESTER-III)

Course Title: Analog and Digital Electronics	Code: ESC 301
Type of Course: Theory	Course Designation: Compulsory
Semester: 3 rd	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	3	-	-	-	-	-	-	-	-	-	3	3	2	3
CO2	3	3	2	2	-	-	-	-	1	-	3	3	1	3
CO3	3	2	2	2	1	-	-	-	1	-	3	3	2	3
CO4	3	3	3	2	3	-	-	-	1	1	3	3	2	3
CO5	3	3	2	2	2	-	-	-	-	2	3	3	2	3
AVG	3	2.75	2.25	2	2	0	0	0	1	1.5	3	3	1.8	3

Course Title: Data Structure & Algorithms	Code: PCC-CS301
Type of Course: Theory	Course Designation: Compulsory
Semester: 3 rd	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	3	3	3	2	1	1	1	1	2	2	3	2	3
CO2	3	3	3	3	-	1	1	1	1	2	2	2	2	2
CO3	3	3	3	3	-	-	-	1	1	-	2	3	3	3
CO4	3	3	3	3	-	-	-	1	1	-	2	1	2	3
CO5	3	3	3	3	-	-	-	1	1	-	2	3	3	3
AVG	3	3	3	3	2	1	1	1	1	2	2	2.4	2.4	2.8

Course Title: Computer Organisation	Code: PCC-CS302
Type of Course: Theory	Course Designation: Compulsory
Semester: 3rd	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	3	3	3	2	-	-	-	-	-	-	2	2	3
CO2	3	3	3	3	3	-	-	-	-	1	-	3	1	2
CO3	3	3	3	1	3	-	-	-	-	2	-	2	2	2
CO4	3	2	3	3	2	-	-	-	-	1	-	3	3	3
CO5	3	2	3	3	-	-	-	-	-	2	2	2	2	3
AVG.	3	2.6	3	2.6	2.5	0	0	0	0	1.5	2	2.4	2	2.6

Course Title:Mathematics-III	Code: BSC 301
Type of Course: Theory	Course Designation: Compulsory
Semester: 3rd	Contact Hours: 2L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	3	3	2	1	-	-	-	-	-	-	-	2	1	2
CO2	3	3	2	1	-	-	-	-	-	-	-	2	2	3
CO3	3	3	2	1	-	-	-	-	-	-	-	2	1	2
CO4	3	3	2	1	-	-	-	-	-	-	-	2	2	1
CO5	3	2	2	-	-	-	-	-	-	-	-	2	2	1
AVG	3	2.8	2	1	0	0	0	0	0	0	0	2	1.6	1.8

Course Title:Economics for Engineers (Humanities-II)	Code: HSMC 301
Type of Course: Theory	Course Designation: Compulsory
Semester: 3rd	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO11	PO12	PSO1	PSO2	Pso3
CO1	2	2	2	2	-	2	1	-	-	3	1	3	3	2
CO2	2	2	2	2	-	2	1	-	-	3	1	3	3	1
CO3	2	2	2	2	-	2	1	-	-	3	1	3	3	2

CO4	2	2	2	2	-	2	1	-	-	3	1	3	3	1
CO5	2	2	2	2	-	2	1	-	-	3	1	3	3	2
AVG.	2	2	2	2	0	2	1	0	0	3	1	3	3	1.6

Course Title: Analog and Digital Electronics	Code: ESC 391
Type of Course: Practical	Course Designation: Compulsory
Semester: 3 rd	Contact Hours: 4P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO11	PSO1	PSO2	Pso3
CO1	3	3	3	1	1	0	-	-	-	-	1	3	3	2	2
CO2	3	3	3	1	1	0	-	-	1	1	3	3	3	2	3
CO3	3	3	3	-	-	0	1	-	1	1	3	3	3	3	2
CO4	3	3	2	2	1	0	1	2	1	1	3	3	3	2	3
CO5	3	2	1	-	2	0	2	2	1	1	3	3	3	3	2
AVG.	3	2.8	2.4	1.34	1.25	0	1.34	2	1	1	3	3	3	2.4	2.4

Course Title: Data Structure & Algorithm Lab	Code: PCC-CS391
Type of Course: Practical	Course Designation: Compulsory
Semester: 3 rd	Contact Hours: 4P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	3	3	3	3	2	1	1	1	1	2	2	3	3	2
CO2	3	2	3	3	-	1	1	1	1	2	2	3	3	2
CO3	3	3	3	2	-	-	-	1	1	-	2	3	3	2
CO4	3	2	3	3	-	-	-	1	1	-	2	3	3	2
CO5	3	3	2	3	-	-	-	1	1	-	2	3	3	2
AVG.	3	2.6	2.8	2.8	2	1	1	1	1	2	2	3	3	2

Course Title: Computer Organization Lab	Code: PCC-CS392
Type of Course: Practical	Course Designation: Compulsory
Semester: 3 rd	Contact Hours: 4P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	3	3	3	2	3	3	2	3	3	2	2	3	3	2
CO2	3	3	1	2	1		2	3	3	2	2	3	3	2
CO3	3	3	2	2	2	1	2	2	2	1	3	3	3	2

CO4	3	3	2	2	2	1	2	2	2	2	3	3	3	2
CO5	3	3	3	2	3	1	2	2	2	1	3	3	3	2
AVG.	3	3	2.2	2	2.2	1.5	2	2.4	2.4	1.6	2.6	3	3	2

Course Title:IT Workshop	Code: PCC-CS393
Type of Course: Practical	Course Designation: Compulsory
Semester: 3 rd	Contact Hours: 4P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	3	3	2	-	1	1	-	-	1	-	3	3	3	2
CO2	3	2	1	-	1	1	1	-	1	-	2	3	3	2
CO3	3	3	3	1	3	-	-	2	1	1	2	3	3	2
CO4	3	3	3	1	2	-	1	1	-	1	3	2	3	2
CO5	3	3	3	2	3	-	1	2	-	1	3	3	3	2
AVG.	3	2.8	2.4	1.34	2	1	1	1.67	1	1	2.6	2.8	3	2

(SEMESTER-IV)

Course Title:Discrete Mathematics	Code: PCC-CS401
Type of Course: Theory	Course Designation: Compulsory
Semester: 4 th	Contact Hours: 3L+1T/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Course Coordinator :	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	3	3	-	-	2	2	-	-	-	-	3	-	1	1
CO2	3	3	-	-	3	3	-	-	-	-	3	-	1	1
CO3	3	3	3	2	3	-	-	-	-	-	3	1	1	1
CO4	3	3	1	3	2	2	-	-	-	-	3	2	2	1
CO5	3	3	3	3	-	-	-	-	-	-	3	3	3	1
AVG.	3	3	2.34	2.67	2.5	2.34	0	0	0	0	3	2	1.6	1

Course Title: Computer Architecture	Code: PCC-CS402
Type of Course: Theory	Course Designation: Compulsory
Semester: 4 th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Course Coordinator :	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
--	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------

CO1	2	-	3	2	-	2	-	-	-	-	-	3	3	3
CO2	2	2	2	1	-	2	-	-	-	-	-	2	2	2
CO3	1	3	2	2	1	2	-	-	-	-	-	3	2	3
CO4	2	3	2	2	1	2	-	-	-	-	-	2	1	3
CO5	-	1	3	1	2	1	-	-	-	-	1	2	2	2
AVG.	1.75	2.25	2.4	1.6	1.34	1.8	0	0	0	0	1	2.4	2	2.6

Course Title: Formal Language & Automata Theory	Code: PCC-CS403
Type of Course: Theory	Course Designation: Compulsory
Semester: 4th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Course Coordinator :	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	3	3	2	2	-	-	-	-	-	3	3	2	3
CO2	3	3	2	2	2	-	-	-	-	-	3	3	3	2
CO3	3	1	2	2	2	-	-	-	-	-	3	3	2	2
CO4	3	2	2	2	3	-	-	-	-	1	3	3	1	1
CO5	3	3	2	2	3	-	-	-	-	2	3	2	1	2
AVG.	3	2.4	2.2	2	2.4	0	0	0	0	1.5	3	2.8	1.8	2

Course Title: Design and Analysis of Algorithms	Code: PCC-CS404
Type of Course: Theory	Course Designation: Compulsory
Semester: 4th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Course Coordinator :	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	2	3	1	2	-	-	-	-	-	-	3	3	1
CO2	3	3	3	3	1	-	-	-	-	-	-	3	3	1
CO3	3	3	3	3	2	-	-	-	-	-	-	2	3	2
CO4	3	3	3	2	2	-	-	-	-	-	-	3	2	1
CO5	3	3	3	1	1	-	-	-	-	-	-	2	3	1
AVG.	3	2.8	3	2	1.6	0	0	0	0	0	0	2.6	2.8	1.2

Course Title: Biology	Code: BSC 401
Type of Course: Theory	Course Designation: Compulsory
Semester: 4th	Contact Hours: 2L+1T/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Course Coordinator :	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	-	1	1	-	-	1	-	-	-	-	-	1	1	1
CO2	-	2	2	-	-	2	-	-	-	-	-	1	1	2
CO3	-	-	-	-	-	1	-	-	-	-	-	1	2	1
CO4	-	-	1	-	-	1	-	-	-	-	-	-	1	2
CO5	-	-	1	-	-	1	-	-	-	-	-	-	1	-
AVG.	0	1.5	1.25	0	0	1.2	0	0	0	0	0	1	1.2	1.5

Course Title: Environmental Sciences	Code: MC-401
Type of Course: Theory	Course Designation: Compulsory
Semester: 4th	Contact Hours: 1L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Course Coordinator :	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	-	2	1	-	-	1	-	-	-	-	-	1	1	1
CO2	-	2	1	-	-	1	-	-	-	-	-	1	1	1
CO3	-	2	2	-	-	2	-	-	-	-	-	1	1	1
CO4	-	2	1	-	-	1	-	-	-	-	-	1	1	1
CO5	-	2	1	-	-	1	-	-	-	-	-	-	1	-
AVG.	0	2	1.2	0	0	1.2	0	0	0	0	0	1	1	1

Course Title: Computer Architecture Lab	Code: PCC-CS492
Type of Course: Practical	Course Designation: Compulsory
Semester: 4th	Contact Hours: 4P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Course Coordinator :	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	3	-	2	2	1	-	0	-	-	-	-	3	2	3
CO2	2	2	2	1	1	-	0	-	-	-	-	3	3	3
CO3	2	1	2	2	-	-	0	1	-	-	-	3	2	2
CO4	3	3	3	2	-	-	0	1	-	-	-	3	3	3
CO5	3	2	2	1	1	2	0	1	-	-	1	3	2	2
AVG.	2.6	2	2.2	1.6	1	2	0	1	0	0	1	3	2.4	2.6

Course Title: Design & Analysis Algorithm Lab	Code: PCC-CS494
Type of Course: Practical	Course Designation: Compulsory
Semester: 4th	Contact Hours: 4P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Course Coordinator :	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	3	3	1	-	-	-	-	-	-	-	3	3	3
CO2	3	3	3	2	-	-	-	-	-	-	-	3	3	2
CO3	3	3	3	2	-	-	-	-	-	-	-	3	3	1
CO4	3	3	3	1	-	-	-	-	-	-	-	3	3	2
CO5	3	3	3	1	1	-	-	-	-	-	-	3	3	1
AVG	3	3	3	1.4	1	0	0	0	0	0	0	3	3	1.8

(SEMESTER- V)

Course Title: Software Engineering	Code: ESC501
Type Of Course: Theory	Course Designation: Compulsory
Semester: 5th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	3	3	2	2	1	-	-	-	2	3	3	3	3
CO2	3	3	2	2	2	-	-	-	1	-	3	3	2	3
CO3	3	1	3	2	2	1	-	-	-	-	3	3	3	2
CO4	3	2	2	2	3	2	-	-	-	1	3	3	3	3
CO5	3	3	2	2	3	-	1	-	-	2	3	3	3	3
AVG.	3	2.4	2.4	2	2.4	1.34	1	0	1	1.67	3	3	2.8	2.8

Course Title: Compiler Design	Code: PCC-CS501
Type of Course: Theory	Course Designation: Compulsory
Semester: 5th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	3	3	3	2	-	2	2	3	2	2	3	2	2
CO2	3	3	3	3	3	1	-	2	2	1	2	3	1	3
CO3	3	3	3	1	3	-	1	3	-	-	2	2	3	3
CO4	3	3	3	3	-	2	2	3	3	2	2	3	2	2
CO5	3	3	3	3	2	-	3	-	2	2	2	3	2	3
AVG.	3	3	3	2.6	2.5	1.5	2	2.5	2.5	1.75	2	2.8	2	2.6

Course Title: Operating Systems	Code: PCC-CS502
Type Of Course: Theory	Course Designation: Compulsory
Semester: 5th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	1	1	1	-	2	3	2	3	-	2	1	3	2
CO2	3	2	1	1	2	-	3	3	1	1	3	2	3	3
CO3	3	2	3	1	1	-	2	3	2	2	2	3	3	2
CO4	3	3	3	2	-	-	3	3	2	2	2	2	3	1
CO5	3	2	1	1	3	-	2	3	1	2	2	1	3	3
AVG.	3	2	1.8	1.2	2	2	2.6	2.8	1.8	1.75	2.2	1.8	3	2.2

Course Title: Object Oriented Programming	Code: PCC-CS503
Type of Course: Theory	Course Designation: Compulsory
Semester: 5th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	3	1	2	-	-	2	-	-	2	2	3	3	1
CO2	3	3	1	3	-	-	1	-	-	2	2	3	2	2
CO3	3	3	2	3	-	-	3	-	-	2	2	3	3	1
CO4	3	3	2	3	-	-	3	-	-	2	2	3	3	2
CO5	3	3	-	1	-	-	2	2	2	2	2	3	3	2
AVG.	3	3	1.5	2.4	0	0	2.2	2	2	2	2	3	2.8	1.6

Course Title: Artificial Intelligence	Code: PEC-IT501B
--	-------------------------

Type of Course: Theory	Course Designation: Elective
Semester: 5th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	3	-	3	2	-	-	2	-	-	-	3	3	2
CO2	2	2	3	2	1	-	-	-	-	-	-	3	2	3
CO3	-	2	2	1	2	-	-	2	-	-	-	2	3	2
CO4	2	3	2	3	1	-	-	2	-	-	-	3	3	2
CO5	3	1	2	3	3	-	-	-	-	-	-	3	3	2
AVG.	2.5	2.2	2.25	2.4	1.8	0	0	2	0	0	0	2.8	2.8	2.2

Course Title: Introduction to Industrial Management (Humanities III)	Code: HSMC-501
Type of Course: Theory	Course Designation: Compulsory
Semester: 5th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	3	-	-	-	-	-	-	-	-	-	-	3	3	1
CO2	-	3	2	-	2	-	-	-	-	-	-	3	3	2
CO3	2	-	-	-	3	-	-	-	-	-	-	3	3	1
CO4	-	-	3	-	-	-	-	-	-	-	-	3	3	2
CO5	2	-	2	-	2	-	-	1	-	-	-	3	3	1
AVG	2.34	3	2.34	-	2.34	0	0	1	0	0	0	3	3	1.4

Course Title: Constitution of India	Code: MC- CS501
Type of Course: Theory	Course Designation: Elective
Semester: 5th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	-	-	-	-	-	2	2	3	1	-	2	--	1	
CO2	-	-	-	-	-	2	2	3	1	-	2		1	
CO3	-	-	-	-	-	2	2	3	1	-	2		1	1

CO4	-	-	-	-	-	2	2	3	1	-	2		1	
CO5	-	-	-	-	-	2	2	3	1	-	2		1	1
AVG.	0	0	0	0	0	2	2	3	1	0	2	0	1	1

Course Title: Software Engineering Lab	Code: ESC591
Type of Course: Practical	Course Designation: Compulsory
Semester: 5th	Contact Hours: 4P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Writer: Course Coordinator	

Mapping of COs with Pos and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	2	3	1	1	-	-	-	-	-	-	-	3	3	3
CO2	1	2	2	1	1	-	-	-	-	-	-	3	2	3
CO3	1	1	3	1	2	-	-	-	-	-	-	2	3	2
CO4	1	1	3	1	2	-	-	-	-	-	-	3	2	3
CO5	3	2	2	2	3	-	-	-	-	-	-	3	3	3
AVG.	1.6	1.8	2.2	1.2	2	0	0	0	0	0	00	2.8	2.6	2.8

Course Title: Operating System Lab	Code: PCC-CS592
Type of Course: Practical	Course Designation: Compulsory
Semester: 5th	Contact Hours: 4P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	3	3	3	1	1	-	-	-	-	-	1	3	3	1
CO2	3	3	3	2	3	-	2	-	-	-	2	3	1	2
CO3	3	3	3	2	3	-	2	1	-	-	2	3	2	1
CO4	3	3	3	2	3	-	2	-	-	1	2	3	3	2
CO5	3	3	3	2	3	-	1	1	-	1	2	3	3	2
AVG.	3	3	3	1.8	2.6	0	1.75	1	0	1	1.8	3	2.4	1.6

Course Title: Object Oriented Programming Lab	Code: PCC-CS593
Type of Course: Practical	Course Designation: Compulsory
Semester: 5th	Contact Hours: 4P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	3	3	3	1	2	-	-	2	-	-	2	2	3	2

CO2	3	3	3	1	3	-	-	1	-	-	2	2	3	2
CO3	3	3	3	2	3	-	-	3	-	-	2	3	3	1
CO4	3	3	3	2	3	-	-	3	-	-	2	3	3	1
CO5	3	3	3	-	1	-	-	2	2	2	2	2	3	2
AVG.	3	3	3	1.5	2.4	0	0	2.2	2	2	2	2.4	3	1.6

(SEMESTER-VI)

Course Title: Database Management Systems	Code: PCC- CS601
Type of Course: Theory	Course Designation: Compulsory
Semester: 6th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	2	3	1	1	-	-	-	-	-	1	3	3	1
CO2	3	3	2	3	3	-	-	-	-	-	-	3	3	2
CO3	3	3	2	3	2	-	2	-	-	1	-	3	2	1
CO4	2	3	3	1	2	-	-	-	-	-	-	3	3	2
CO5	1	2	3	2	1	-	-	-	-	2	-	3	3	2
AVG.	2.4	2.6	2.6	2	1.8	0	2	0	0	1.5	1	3	2.8	1.6

Course Title: Computer Networks	Code: PCC- CS602
Type of Course: Theory	Course Designation: Compulsory
Semester: 6th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	1	-	2	2	-	-	-	-	-	3	2	1	3
CO2	3	2	2	3	3	-	-	-	-	-	3	2	2	1
CO3	3	2	-	2	3	-	-	-	-	-	3	2	1	3
CO4	3	3	3	3	3	-	-	-	-	1	3	2	2	2
CO5	2	3	3	3	3	-	-	-	-	2	3	2	2	3

AVG.	2.8	2.2	2.67	2.6	2.8	0	0	0	0	1.5	3	2	1.6	2.4
------	-----	-----	------	-----	-----	---	---	---	---	-----	---	---	-----	-----

Course Title: Image Processing	Code: PEC-IT601D
Type of Course: Theory	Course Designation: Elective
Semester: 6th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	3	3	2	2	-	-	-	-	-	3	3	3	2
CO2	3	3	2	3	2	-	-	-	-	-	3	3	3	2
CO3	3	1	3	2	2	-	-	-	-	-	3	3	3	3
CO4	3	2	2	3	3	-	-	-	-	1	3	3	3	2
CO5	3	3	3	3	3	-	-	-	-	2	3		3	2
AVG.	3	2.4	2.6	2.6	2.4	0	0	0	0	1.5	3	3	3	2.2

Course Title: Pattern Recognition	Code: PEC-IT602D
Type of Course: Theory	Course Designation: Elective
Semester: 6th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	3	2	2	2	1	-	-	-	2	1	3	3	2
CO2	3	3	2	2	2	1	-	-	-	2	1	2	2	2
CO3	3	3	2	2	2	1	-	-	-	2	1	2	3	1
CO4	3	3	2	2	2	1	-	-	-	1	1	1	3	3
CO5	3	3	2	2	2	1	-	-	-	2	1	2	2	2
AVG.	3	3	2	2	2	1	0	0	0	1.8	1	2	2.6	2

Course Title: Numerical Methods	Code: OEC-IT601A
Type of Course: Theory	Course Designation: Elective
Semester: 6th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	-	2	-	-	-	-	2	-	-	-	3	3	3	3
CO2	-	-	-	-	-	-	-	-	-	-	2	3	2	3
CO3	-	2	-	2	-	-	-	-	2	-	2	-	3	-
CO4	-	-	-	-	2	-	3	-	-	-	2	3	3	2
CO5	-	-	-	-	-	-	-	-	-	-	-	-	3	2
AVG.	0	2	0	2	2	0	2.5	0	2	0	2.25	3	2.8	2.5

Course Title: Research Methodology	Code: PROJ- CS601
Type of Course: Theory	Course Designation: Compulsory
Semester: 6th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	3	3	2	2	-	-	1	-	2	3	3	3	3
CO2	3	3	2	2	2	-	-	1	-	2	3	3	2	1
CO3	3	1	2	2	2	-	-	1	-	2	3	2	3	3
CO4	3	2	2	2	3	-	-	1	-	2	3	3	3	3
CO5	-	-	-	-	-	-	3	1	-	-	3	1	3	3
AVG.	3	2.25	2.25	2	2.25	0	3	1	0	2	3	2.4	2.8	2.6

Course Title: Database Management System Lab	Code: PCC-CS691
Type of Course: Practical	Course Designation: Compulsory
Semester: 6th	Contact Hours: 4P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	Pso3
CO1	3	2	3	1	3	1	1	2	-	1	2	3	2	3
CO2	3	2	3	2	3	1	-	2	-	1	2	3	3	3
CO3	3	3	3	2	3	1	2	2	-	1	2	2	2	2
CO4	3	2	3	2	3	1	2	2	-	1	2	3	3	3
CO5	3	3	3	3	3	1	2	2	-	1	2	2	3	2
AVG.	3	2.4	3	2	3	1	1.75	2	0	1	2	2.6	2.6	2.6

Course Title: Computer Networks Lab	Code: PCC-CS692
Type of Course: Practical	Course Designation: Compulsory
Semester: 6th	Contact Hours: 4P/week
Continuous Assessment: 40 Marks	Final Exam: 60 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	2	3	-	3	-	-	2	-	3	-	3	3	2
CO2	3	2	3	-	3	-	-	0	-	3	-	3	2	2
CO3	3	2	3	-	3	-	-	2	-	3	3	3	3	3
CO4	3	2	3	-	3	-	-	2	-	3	3	3	3	2
CO5	3	2	3	-	3	-	-	0	-	3	0	2	3	2
AVG.	3	2	3	0	3	0	0	2	0	3	3	2.8	2.8	2.2

(SEMESTER-VII)

Course Title: Machine Learning	Code: PEC-CS701E
Type of Course: Theory	Course Designation: Elective
Semester: 7th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	-	-	2	-	-	3	3	3	1
CO2	3	3	2	3	3	-	-	2	1	-	3	3	2	3
CO3	3	2	2	3	3	-	-	2	1	-	3	2	3	2
CO4	3	3	3	3	3	-	-	2	1	-	3	3	3	3
CO5	2	2	2	2	3	-	-	1	-	-	3	2	3	2
AVG.	2.8	2.6	2.4	2.8	3	0	0	1.8	1	0	3	2.6	2.8	2.2

Course Title: Multimedia Technology	Code: OEC-CS701B
Type of Course: Theory	Course Designation: Elective
Semester: 7th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	-	-	-	-	-	-	-	-	-	-	-	2	2	3
CO2	-	-	-	2	-	-	-	-	-	-	-	1	3	2
CO3	-	-	-	2	1	-	-	-	-	-	-	3	2	2
CO4	-	-	-	2	1	-	-	-	-	-	-	1	2	2
CO5	-	-	-	2	1	-	-	-	-	-	-	3	3	3
AVG.	0	0	0	2	1	0	0	0	0	0	0	2	2.4	2.4

Course Title: Neural Network and Deep learning	Code: PEC-CS 702A
Type of Course: Theory	Course Designation: Elective
Semester: 7th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	-	-	-	-	-	-	-	-	-	-	-	1	2	
CO2	-	-	-	2	-	-	-	1-	-	-	-	1		2
CO3	1	-	-	1	1	-	-	2	-	2	-		2	2
CO4	1	1	-	2	2	-	-	1	-	1	-	2	2	
CO5	-	1	-	2	1	-	-	-	-	-	-			3
AVG.	1	1	0	1.75	1.33	0	0	1.33	0	1.5	0	1.33	2	2.33

Course Title: Project Management and Entrepreneurship	Code: HSMC 701
Type of Course: Theory	Course Designation: Compulsory
Semester: 7th	Contact Hours: 2L+1T/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	3	3	3	2	-	-	-	-	-	3	3	3	2
CO2	3	3	3	3	3	-	-	-	-	-	2	3	2	3
CO3	3	3	3	1	3	1	-	-	-	-	3	2	3	3
CO4	3	3	3	3		-	-	-	-	-	3	3	3	2
CO5	3	3	3	3	2	-	-	-	-	-	3	2	2	3

AVG.	3	3	3	2.6	2.5	1	0	0	0	0	2.8	2.6	2.6	2.6
-------------	---	---	---	-----	-----	---	---	---	---	---	-----	-----	-----	-----

Course Title: Project-II	Code: PROJ-CS781
Type of Course: Sessional	Course Designation: Compulsory
Semester: 7th	Contact Hours: 12P/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	2	3	3	3	3	3	-	-	-	2	2	3	3	1
CO2	2	3	3	3	1	2	-	-	-	-	-	3	2	2
CO3	2	2	-	2	3	-	-	-	-	-	-	2	3	3
CO4	2	2	-	2	3	-	-	-	-	-	-	3	3	2
CO5	1	1	1	2	2	-	-	-	-	-	-	2	2	2
AVG.	1.8	2.2	2.34	2.4	2.4	2.5	0	0	0	2	2	2.6	2.6	2

(SEMESTER-VIII)

Course Title: Cryptography and Network Security	Code: PEC-CS801B
Type of Course: Theory	Course Designation: Elective
Semester: 8th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	3	3	2	-	-	-	-	-	-	-	1	3	2	2
CO2	3	3	3	-	2	-	-	-	-	-	-	3	3	2
CO3	2	2	1	2	3	1	1	1	3	-	-	2	2	2
CO4	3	3	2	2	3	1	1	0	2	-	-	3	2	3
CO5	3	2	3	2	1	-	-	-	1	-	-	2	3	3
AVG.	2.8	2.6	2.2	2	2.25	1	1	1	2	0	1	2.6	2.4	2.25

Course Title: E-Commerce & ERP	Code: OEC-CS802A
Type of Course: Theory	Course Designation: Elective
Semester: 8th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	1	2	-	-	1	2	-	-	-	1	1	3	3	1
CO2	1	2	2	1	1	1	-	-	-	1	-	3	2	2
CO3	1	1	1	1	1	-	-	-	-	1	-	2	3	1
CO4	1	1	1	1	1	1	-	-	-	1	-	3	3	2
CO5	1	1	1	1	1	1	-	-	-	1	-	2	2	2
AVG.	1	1.4	1.25	1	1	1.25	0	0	0	1	1	2.6	2.6	1.6

Course Title: Cyber Law and Ethics	Code: OEC-CS801B
Type of Course: Theory	Course Designation: Elective
Semester: 8th	Contact Hours: 3L/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	2	2	-	-	1	2	-	-	-	1	1	3	2	1
CO2	1	2	2	1	1	1	-	-	-	1	-	3		1
CO3	1	1	1	2	1	-	-	-	-	2	-		3	1
CO4	1	1	1	1	1	1	-	-	-	1	-	2	3	
CO5	1	1	1	1	1	1	-	-	-	1	-			1
AVG.	1.2	1.4	1.25	1.25	1	1.25	0	0	0	1.2	1	2.6	2.6	1

Course Title: Project-III	Code: PROJ-CS881
Type of Course: Sessional	Course Designation: Compulsory
Semester: 8th	Contact Hours: 12P/week
Continuous Assessment: 25 Marks	Final Exam: 70 Marks
Writer: Course Coordinator	

Mapping of COs with POs and PSOs (Course Articulation Matrix):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3
CO1	2	2	1	2	2	1	-	-	-	-	-	3	2	2
CO2	2	2	3	3	3	1	-	-	-	-	-	3	2	3
CO3	3	3	3	2	1	-	-	-	-	-	-	3	1	2
CO4	2	2	2	2	2	-	-	2	2	2	2	3	3	3
CO5	2	-	2	-	2	-	2	3	3	3	3	2	2	2

AVG.	2.2	2.25	2.2	2.25	2	1	2	2.5	2.5	2.5	2.5	2.8	2	2.4
-------------	-----	------	-----	------	---	---	---	-----	-----	-----	-----	-----	---	-----