

**Curriculum
for
Final Year
of
Computer Science and Design
(2021 Course)**

(With effect from 2024-25)



**Faculty of Science and
Technology
Savitribai Phule Pune University,
Maharashtra,
India**

Savitribai Phule Pune University
Fourth Year of Computer Science and Design(2021 Course)
(With effect from Academic Year 2024-25)

Semester VII	
---------------------	--

Course Code	Course Name	Teaching Scheme (Hours/week)			Examination Scheme and Marks						Credit Scheme			
		Lecture	Practical	Tutorial	Mid-Sem	End-Sem	Term work	Practical	Oral\PR	Total	Lecture	Practical	Tutorial	Total
418241	Computer Vision	03	-	-	30	70	-	-	-	100	3	-	-	3
418242	Deep learning	03	-	-	30	70	-	-	-	100	3	-	-	3
418243	Game Design and Development	03	-	-	30	70	-	-	-	100	3	-	-	3
418244	Elective III	03	-	-	30	70	-	-	-	100	3	-	-	3
418245	Elective IV	03	-	-	30	70	-	-	-	100	3	-	-	3
418246	Laboratory Practice III	-	04	-	-	-	50	50	-	100	-	2	-	2
418247	Laboratory Practice IV	-	02	-	-	-	25	-	25	50	-	1	-	1
418248	Project Stage I	-	02	-	-	-	50	-	-	50	-	2	-	2
Total Credit											15	05	-	20
Total		15	08	-	150	350	125	50	25	700	15	05	-	20
418249	Audit Course 7										Grade			
Elective III					Elective IV									
(A) Object Oriented Modelling and Design (B) Software Testing and Quality Assurance (C) Blockchain Technology (D) Information Retrieval					(A) Natural Language Processing (B) Software Development for Portable devices (C) Compiler Design (D) Advanced UI/UX Design									
Laboratory Practice III: Laboratory assignments Courses- 418241, 418242,418243					Laboratory Practice IV: Laboratory assignments Courses- 418244, 418245									
Audit Course 7(AC7) Options: AC7- I MOOC- Learn New Skills AC7- II Entrepreneurship Development AC7- III Botnet of Things AC7- IV 3D Printing AC7- V Industrial Safety and Environment Consciousness														

<p style="text-align: center;">Savitribai Phule Pune University Fourth Year of Computer Science and Design (2021Course) (With effect from Academic Year 2024-25)</p>

Semester VIII	
----------------------	--

Course Code	Course Name	Teaching Scheme (Hours/week)			Examination Scheme and Marks						Credit Scheme			
		Lecture	Practical	Tutorial	Mid-Sem	End-Sem	Term work	Practical	Oral\PR	Total	Lecture	Practical	Tutorial	Total
418250	Information & Cyber Security	03	-	-	30	70	-	-	-	100	3	-	-	3
418251	Generative AI	03	-	-	30	70	-	-	-	100	3	-	-	3
418252	Elective V	03	-	-	30	70	-	-	-	100	3	-	-	3
418253	Elective VI	03	-	-	30	70	-	-	-	100	3	-	-	3
418254	Laboratory Practice V	-	02	-	-	-	50	50	-	100		01	-	1
418255	Laboratory Practice VI	-	02	-	-	-	25	-	25	50	-	01	-	1
418256	Project Stage II	-	06	-	-	-	100	-	50	150	-	06	-	6
Total Credit											12	08	-	20
Total		12	10	-	120	280	175	50	75	700	12	08	-	20
418257	Audit Course 8										Grade			
Elective V						Elective VI								
(A) Computational Intelligence (B) Software Defined Networks (C) High Performance Computing (D) DevOps						(A) Data Visualization (B) Optimization Algorithm (C) GPU Programming and Architecture Design (D) Mobile Computing								
Laboratory Practice V: Laboratory assignments Courses- 418250,418251						Laboratory Practice VI Laboratory assignments Courses- 418252,418253								
Audit Course 8(AC8) Options: AC8- I Conversational Interfaces AC8- II social media and Analytics AC8- III MOOC- Learn New Skills AC8- IV Emotional Intelligence														

**Curriculum
for
Third Year
Computer Science and Design
(2021 Course)**

(With effect from 2023-24)



<http://unipune.ac.in>

**Faculty of Science and Technology
Savitribai Phule Pune University
Maharashtra, India**

Savitribai Phule Pune University														
Third Year of Computer Science and Design (2021 Course)														
(With effect from Academic Year 2023-24)														
Semester-V														
Course Code	Course Name	Teaching Scheme (Hours/Week)			Examination Scheme and Marks						Credit Scheme			
		Lecture	Practical	Tutorial	In-Sem	End-Sem	Term work	Practical	Oral	Total	Lecture	Practical	Tutorial	Total
318241	Software Engineering and Project Management	03	-	-	30	70	-	-	-	100	03	-	-	03
318242	Theory of Computation	03	-	-	30	70	-	-	-	100	03	-	-	03
318243	Database System Design	03	-	-	30	70	-	-	-	100	03	-	-	03
318244	Design and analysis of Algorithm	03	-	-	30	70	-	-	-	100	03	-	-	03
318245	Elective – I	03	-	-	30	70	-	-	-	100	03	-	-	03
318246	Database System Design Laboratory	-	04	-	-	-	25	25	-	50	-	02	-	02
318247	Design And Analysis of algorithm Laboratory	-	02	-	-	-	25	25	-	50	-	01	-	01
318248	Laboratory Practice I	-	02	-	-	-	25	-	25	50	-	01	-	01
318249	Seminar and Technical Communication	-		01	-	-	25	-	-	25	-	-	01	01
318250	Environmental Studies	-	-	01	-	-	25	-	-	25	-	-	01	01
Total		15	08	02	150	350	125	50	25	700	15	04	02	21
310250	Audit Course 5										Grade			
		Total									15	04	02	21
** Elective-I Options		Audit Course 5 Options												
318245A: Internet of Things		310250A: Cyber Security												
318245B: Pattern Recognition		310250B: Professional Ethics and Etiquettes												
318245C: Distributed Systems		310250C: MOOC- Learn New Skills												
318245D: Data Mining and warehousing		310250D: Engineering Economics												
		310250E: Foreign Language												
Laboratory Practice I														
Assignments are based on Elective I Theory Course														

Savitribai Phule Pune University														
Third Year of Computer Science and Design (2021 Course)														
(With effect from Academic Year 2023-24)														
Semester-VI														
Course Code	Course Name	Teaching Scheme #(Hours/Week)			Examination Scheme and Marks						Credit Scheme			
		Lecture	Practical	Tutorial	In-Sem	End-Sem	Term work	Practical	Oral	Total	Lecture	Practical	Tutorial	Total
318251	Artificial Intelligence	04	-	-	30	70	-	-	-	100	03	-	-	03
318252	Web Technology & Application Design	04	-	-	30	70	-	-	-	100	03	-	-	03
318253	UI/UX Design	04	-	-	30	70	-	-	-	100	03	-	-	03
318254	Elective – II	04	-	-	30	70	-	-	-	100	03	-	-	03
310255	Internship**	-	**	-	-	-	100	-	-	100	-	04	-	04
318255	Web Technology & Application Design Laboratory	-	04	-	-	-	50	-	25	75	-	02	-	02
318256	UI/UX design Laboratory	-	02	-	-	-	25	-	25	50	-	01	-	01
318257	Laboratory Practice II	-	04	-	-	-	50	25		75	-	02	-	02
Total		16	10	-	120	280	225	25	50	700	12	09	-	21
310259	Audit Course 6										Grade			
		Total									12	09	-	21
318256 Elective II Options:		310259 Audit Course 6 Options:												
318254(A) Multimedia Techniques		310259(A) Digital and Social Media Marketing												
318254(B) Augmented and Virtual Reality		310259(B) Sustainable Energy Systems												
318254(C) Cloud Computing		310259(C) Leadership and Personality Development												
318254(D) Business Intelligence and Data Analytics		310259(D) Foreign Language												
		310259(E) Learn New Skills												
Laboratory Practice II:														
Assignments are based on Artificial Intelligence and Elective II Theory course														
Internship** Internship guidelines are provided in course curriculum sheet.														