

**Faculty of Engineering
Savitribai Phule Pune University, Pune
Maharashtra, India**



**Curriculum
for
Fourth Year of Computer Engineering
(2019 Course)
(With effect from 2022-23)**

BE Computer Engineering 2019 Course tentative Curriculum structure:

| Savitribai Phule Pune University Final Year of Computer Engineering (2019 Course) (With effect from Academic Year 2022-23) | | | | | | | | | | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|------------------------------|-----------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------|----------|------------|---------------|-----------|----------|-----------|
| 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/Pre | Total | Lecture | Practical | Tutorial | Total |
| 410241 | Design and Analysis of Algorithms | 03 | - | - | 30 | 70 | - | - | - | 100 | 3 | - | - | 3 |
| 410242 | Machine Learning | 03 | - | - | 30 | 70 | - | - | - | 100 | 3 | - | - | 3 |
| 410243 | Blockchain Technology | 03 | - | - | 30 | 70 | - | - | - | 100 | 3 | - | - | 3 |
| 410244 | Elective III | 03 | - | - | 30 | 70 | - | - | - | 100 | 3 | - | - | 3 |
| 410245 | Elective IV | 03 | - | - | 30 | 70 | - | - | - | 100 | 3 | - | - | 3 |
| 410246 | Laboratory Practice III | - | 04 | - | - | - | 50 | 50 | - | 100 | - | 2 | - | 2 |
| 410247 | Laboratory Practice IV | - | 02 | - | - | - | 50 | - | - | 50 | - | 1 | - | 1 |
| 410248 | Project Stage I | - | 02 | - | - | - | 50 | - | - | 50 | - | 2 | - | 2 |
| Total Credit | | | | | | | | | | | 15 | 05 | - | 20 |
| Total | | 15 | 08 | - | 150 | 350 | 150 | 50 | - | 700 | 15 | 05 | - | 20 |
| 410249 | Audit Course 7 | | | | | | | | | | Grade | | | |
| Elective III | | | | | Elective IV | | | | | | | | | |
| 410244(A) Pervasive Computing 410244(B) Multimedia Techniques 410244(C) Cyber Security and Digital Forensics 410244(D) Object Oriented Modeling and Design 410244(E) Digital Signal Processing | | | | | 410245(A) Information Retrieval 410245(B) GPU Programming and Architecture 410245(C) Mobile Computing 410245(D) Software Testing and Quality Assurance 410245(E) Compilers | | | | | | | | | |
| Laboratory Practice III: Laboratory assignments Courses- 410241, 410242, 410243 | | | | | Laboratory Practice IV: Laboratory assignments Courses- 410244, 410245 | | | | | | | | | |
| 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 | | | | | | | | | | | | | | |

Savitribai Phule Pune University
Final Year of Computer Engineering (2019 Course)
(With effect from Academic Year 2022-23)

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/Pre | Total | Lecture | Practical | Tutorial | Total |
| 410250 | High Performance Computing | 03 | - | - | 30 | 70 | - | - | - | 100 | 03 | | | 03 |
| 410251 | Deep Learning | 03 | - | - | 30 | 70 | - | - | - | 100 | 03 | | | 03 |
| 410252 | Elective V | 03 | - | - | 30 | 70 | - | - | - | 100 | 03 | | | 03 |
| 410253 | Elective VI | 03 | - | - | 30 | 70 | - | - | - | 100 | 03 | | | 03 |
| 410254 | Laboratory Practice V | - | 02 | - | - | - | 50 | 50 | - | 100 | | 01 | | 01 |
| 410255 | Laboratory Practice VI | - | 02 | - | - | - | 50 | - | - | 50 | | 01 | | 01 |
| 410256 | Project Stage II | - | 06 | - | - | - | 100 | - | 50 | 150 | | 06 | | 06 |
| Total Credit | | | | | | | | | | | 12 | 08 | - | 20 |
| Total | | 12 | 10 | - | 120 | 280 | 200 | 50 | 50 | 700 | 12 | 08 | - | 20 |
| 410257 | Audit Course 8 | | | | | | | | | | Grade | | | |
| Elective V | | | | | Elective VI | | | | | | | | | |
| 410252(A) Natural Language Processing | | | | | 410253(A) Pattern Recognition | | | | | | | | | |
| 410252(B) Image Processing | | | | | 410253(B) Soft Computing | | | | | | | | | |
| 410252(C) Software Defined Networks | | | | | 410253(C) Business Intelligence | | | | | | | | | |
| 410252(D) Advanced Digital Signal Processing | | | | | 410253(D) Quantum Computing | | | | | | | | | |
| 410252(E) Open Elective | | | | | 410253(E) Open Elective | | | | | | | | | |
| Lab Practice V: Laboratory assignments Courses- 410250, 410251 | | | | | Lab Practice VI: Laboratory assignments Courses- 410252, 410253 | | | | | | | | | |
| Audit Course 8(AC8) Options: AC8- I Usability Engineering AC8- II Conversational Interfaces AC8- II Social Media and Analytics AC8- IV MOOC- Learn New Skills AC8- V Emotional Intelligence | | | | | | | | | | | | | | |