

Board of Studies (Civil Engineering)
B.E.Civil Equivalences

2020
CS/2114

| 2003 Course Semester -I | | | Equivalent subject in 2008 Course | | | |
|-------------------------|-----------------|--|-----------------------------------|-----------------|---|-------------------------|
| Sr.No | Code of Subject | Name of Subject | Sr.No | Code of Subject | Name of Subject | |
| 1 | 401001 | Hydrology and Irrigation | 1 | --- | No Equivalence | |
| 2 | 401002 | Environmental Engg. -II | 2 | 401001 | Environmental Engineering-II | 2008 Course I Semester |
| 3 | 401003 | Quantity Surveying , Contracts and Tenders | 3 | 401 009 | Quantity Surveying, Contracts and Valuation | 2008 Course II Semester |
| 4 | 401004 | Structural Design III | 4 | 401003 | Structural Design-III | 2008 Course I Semester |
| 5 | 401005 | Elective I- System Approach in Civil Engg. | 5 | 401004 | Elective -I Systems Approach in Civil Engineering | 2008 Course I Semester |
| 6 | 401005 | Elective I Finite Element Method | 6 | 401 008 | Elective IV Finite Element Method | 2008 Course II Semester |
| 7 | 401005 | Elective I Structural Design of Bridges | 7 | 401004 | Elective -I Structural Design of Bridges | 2008 Course I Semester |
| 8 | 401005 | Elective I Architecture and Town Planning | 8 | 401004 | Elective -I Architecture and Town Planning | 2008 Course I Semester |
| 9 | 401005 | Elective I Advanced Environmental Management | 9 | 401007 | Elective III Advanced Environmental Management | 2008 Course II Semester |
| 10 | 401005 | Geoinformatics | 10 | 401 008 | Elective IV Geoinformatics | 2008 Course II Semester |

Board of Studies (Civil Engineering)
B.E.Civil Equivalences

2024
03/2/11/2

| 2003 Course Semester –II | | | Equivalent subject in 2008 Course | | |
|--------------------------|-----------------|--|-----------------------------------|-----------------|--|
| Sr. No | Code of Subject | Name of Subject | Sr.No | Code of Subject | Name of Subject |
| 1 | 401 007 | Elective II- Earthquake Engg. | 1 | 401 005 | Elective II- Earthquake Engg. |
| 2 | 401 007 | Elective II- Advanced Transportation Engg. | 2 | | No Equivalence |
| 3 | 401 007 | Elective II- Construction Management | 3 | 401 007 | Elective III- Construction Management |
| 4 | 401 007 | Elective II- Integrated Water Resources Planning and Management | 4 | 401 008 | Elective IV- Integrated Water Resources Planning and Management |
| 5 | 401 007 | Elective II- Advanced Engg. Geological with Mechanics | 5 | 401 007 | Elective III- Advanced Engg. Geological with Mechanics |
| 6 | 401 007 | Elective II- Concrete Technology | 6 | 401 005 | Elective II- Advanced Concrete Technology |
| 7 | 401 008 | Dams and Hydraulic Structures | 7 | 401 002 | Dams and Hydraulic Structures |
| 8 | 401009 | Transportation Engg. II | 8 | 401010 | Transportation Engg. II |
| 9 | 401 010 | Foundation Engg. | 9 | --- | No Equivalence |

Equivalence between 2003 course and 2008 course for **FULL TIME DEGREE** for subjects in **Mechanical Engineering** offered at **Final Year Engineering**.

| Sr. No. | CODE | 2003 COURSE | Passing Head/s | CODE | 2008 COURSE | Passing Head/s |
|---------|--------|--|----------------|----------|---|--------------------|
| | | SUBJECT | | | SUBJECT | |
| 1 | 402041 | Mechanical System Design | Th., TW, Oral | 402048 | Mechanical System Design | Th., TW, Oral |
| 2 | 402042 | Dynamics of Machinery* | Th., TW, Oral | 402042 | Dynamics of Machinery | Th., TW, Oral |
| 3 | 402043 | Mechatronics | Th., TW, Oral | 302050 | Mechatronics | Th, TW |
| 4 | 402044 | Gas Turbines and Jet Propulsion | Th | | Not Exempted | Th |
| 5 | 402045 | Elective-I Product Design and Development | Th | 402044 B | Product Design and Development | Th, TW |
| 6 | 402045 | Elective-I Material Engineering and their Processing | Th | | Not Exempted | Th |
| 7 | 402045 | Elective-I Alternative Energy Sources | Th | | Not Exempted | Th |
| 8 | 402045 | Elective-I Kinematic Analysis and Synthesis | Th | | Not Exempted | Th |
| 9 | 402045 | Elective – I Operation Research | Th | 402045 C | Quantitative and Decision Making Technique | -- |
| 10 | 402045 | Costing and Cost Control | Th | | Not Exempted | Th |
| 11 | 402046 | Project Work | TW, Oral | 402046 B | Project Work | TW, Oral |
| 12 | 402047 | CAD/CAM and Automation | Th., TW, Oral | 402041 | CAD/ CAM Automation | Th., TW, Practical |
| 13 | 402048 | Power Plant Engineering | Th., TW, Oral | 402047 | Power Plant Engineering | Th., TW, Oral |
| 14 | 402049 | Industrial Fluid Power | Th., TW, Oral | 402043 | Industrial Fluid Power | Th., TW, Oral |
| 15 | 402050 | Elective – II Robotics | Th | | | |
| 16 | 402050 | Elective – II Computational Fluid Dynamics | Th | 402049 A | Elective – III Computational Fluid Dynamics | TW |
| 17 | 402050 | Elective – II Energy Management | Th | 402044 A | Elective – I Energy Audit and Management | TW |
| 18 | 402050 | Elective – II Rapid Prototyping | Th | | Not Exempted | Th |
| 19 | 402050 | Elective – II Reliability Engineering | Th | 402050 C | Reliability Engineering | Th |
| 20 | 402050 | Elective – II Automobile Engineering | Th | 402045 A | Elective – II Automobile Engineering | Th |

Wherever Oral examination as head of passing, in 2003 course and there is no oral examination corresponding subject in 2008 course, the respective candidates have to appear respective oral examination in old course and marks will be awarded as per 2008 course for the corresponding head of passing. This process has to be carried out till no of candidates exhausted.

University of Pune

Equivalence between 2003 course and 2008 course for **FULL TIME DEGREE** for subjects in **Mechanical Engineering Sandwich** offered at **Final Year**.

| Sr. No. | CODE | 2003 COURSE | Passing Head/s | CODE | 2008 COURSE | Passing Head/s |
|---------|--------|--|----------------|----------|--|--------------------|
| | | SUBJECT | | | SUBJECT | |
| 1 | 402061 | Design Engineering | Th., TW, Oral | 402061 | Machine And Computer Aided Design | Th., TW, Oral |
| 2 | 402042 | Dynamics of Machinery | Th., TW, Oral | 402042 | Dynamics of Machinery | Th., TW, Oral |
| 3 | 402062 | Industrial Hydraulics and Pneumatics | Th., TW, Oral | 402062 | Industrial Hydraulics and Pneumatics | Th., TW, Oral |
| 4 | 402047 | CAD/CAM and Automation | Th., TW, Oral | 402041 | CAD/ CAM Automation | Th., TW, Practical |
| 5 | 402063 | Elective – II Refrigeration and Air Conditioning | Th. | 402063 A | Elective – II Refrigeration and Air Conditioning | Th., TW |
| 6 | 402063 | Elective – II Robotics | Th. | 402064 C | Elective – III Robotics | Th. |
| 7 | 402063 | Elective – II Tribology | Th. | 302066 | Tribology | Th. |
| 8 | 402063 | Elective – II Automobile Engineering | Th. | 402064 A | Elective – III Automobile Engineering | Th. |
| 9 | 402063 | Elective – II Computational Fluid Dynamics | Th. | 402063 B | Elective – II Computational Fluid Dynamics | Th. TW |
| 10 | 402064 | Thermal Engineering Lab. Practice | Oral | | Not Exempted. | |
| 11 | 402065 | Elective – III Industrial Engineering | Th. | | Not Exempted | |
| 12 | 402065 | Elective – III Costing and Cost Control | Th. | 402066 A | Elective – IV Costing and Cost Control | Th. |
| 13 | 402065 | Elective – III Production Management | Th. | | Not Exempted | |
| 14 | 402065 | Elective – III Machine Tool Design | Th. | 402066 B | Elective – IV Machine Tool Design | Th. |
| 15 | 402065 | Elective – III Non Conventional Energy | Th. | | Not Exempted | |

Wherever Oral examination as head of passing, in 2003 course and there is no oral examination corresponding subject in 2008 course, the respective candidates have to appear respective oral examination in old course and marks will be awarded as per 2008 course for the corresponding head of passing. This process has to be carried out till no of candidates exhausted.

Subject Equivalence for B.E.(Electronics)

| Code No. | (2003 Course) | Code No. | (2008 Course) |
|----------|--|----------|---|
| 404201 | Computer Networks(Th) | 404207 | Computer Network and Security (Th) |
| 404202 | Electronic Product Design(Th) | 404201 | Electronics System Design (Th) |
| 404203 | Advanced Power Electronics(Th) | 404204 | Advance Power Electronics (Elective-I) (Th) |
| 404204 | VLSI Design(Th) | 404202 | VLSI Design(Th) |
| 404205 | Elective-I | | Elective-I |
| | Embedded System Design(Th) (TW)(PR) | 404203 | Embedded System (Th)(TW)(PR) |
| | Process Instrumentation(Th)(TW)(PR) | 404208 | Process automation(Th)(TW)(PR) |
| | Advanced Digital Signal Processing(Th)(TW)(PR) | 404210 | Advanced Digital Signal Processing(2003 Course)(Th)(TW)(PR) |
| | Advanced Communication Engineering(Th)(TW)(PR) | | Advance Communication System (Elective-IV) (Th)(TW)(PR) |
| | Software Engineering(Th)(TW)(PR) | | Software Engineering(2003 Course) (Th)(TW)(PR) |
| 404206 | Electronics Laboratory – III(PR) | | Electronics Laboratory - III(2003 Course)(PR)/VLSI-PR, ES_OR |
| 404207 | Seminar(TW) | 404206 | Project Part-I(OR) |
| 404209 | Electronic Measurement systems(Th) | 404204 | Advance Measurement system (E-I) (Th) |
| 404210 | Management Information Systems(Th) | | Management Information Systems (2003 Course) (Th) |
| 404211 | Bio-Medical Electronics (Th) | 404204 | Biomedical Instrumentation (E-I) (Th) |
| 404212 | Elective-II | | |
| | Real Time Operating Systems(Th)(TW)(PR) | | Real Time Operating Systems(2003 course)(TW)(PR) |
| | Artificial Intelligence(Th)(TW)(PR) | 404210 | Artificial Intelligence (E-IV) (Th) |
| | Robotics and Industrial Automation(Th)(TW)(PR) | 404205 | Robotics and automation (E-II) (Th) |
| | System Programming and Operating Systems(Th)(TW)(PR) | | System Programming and Operating Systems (2003 Course)(Th)(TW)(PR) |
| 404212 | Digital Image Processing(Th)(TW)(PR) | 404209 | Image processing and Machine vision (E-III) (Th)(TW)(PR) |
| 404213 | Electronics Laboratory – IV(PR) | | Electronics Laboratory - IV(2003 Course)(PR) |
| 404208 | Project(TW)(OR) | 404211 | Project part-II(TW)(OR)/PRO.AUT-I)-OR E-I-PR |

Subject Equivalence for B.E.(E&TC)

| Code No. | (2003 Course) | Code No. | (2008 Course) |
|----------|---|----------|--|
| 404214 | Computer Network (Th) | 404183 | Computer Network(Th) |
| 404215 | Voice Network(Th) | | Voice Network (2003 Course) (Th) |
| 404216 | Electronic Product design(Th) | 404181 | Electronic Product design(Th) |
| 404217 | VLSI Design (Th) | 404182 | VLSI Design Technology(Th) |
| 404218 | Elective-I | | Elective-I |
| | Embedded system design(Th) (TW)(PR) | 404184 | Embedded System and RTOS (E-I) (Th) (TW)(PR) |
| | Advanced Power electronics (Th) (TW)(PR) | 404184 | Industrial Drives and control (E-I) (TW)(PR) |
| | Advanced Digital Signal Processing (Th) (TW)(PR) | | Advanced Digital Signal Processing(2003 Course) (Th) (TW)(PR) |
| | Robotics and Industrial Automation(Th) (TW)(PR) | 404190 | PLC and Industrial process automation (E-IV) (Th) (TW)(PR) |
| 404219 | Communication Lab-I (PR) | | Communication Lab-I(2003 Course)(PR) |
| 404220 | Seminar(TW) | 404186 | Project Part-I(TW) |
| 404222 | Electronics Measurement System(Th) | 404189 | Test and Measurement Systems (E-III) (Th) |
| 404223 | Telecommunication Networks and Management (Th) | 404187 | Telecommunication switching systems (Th) |
| 404224 | Optical and Microwave communication(Th) | 404188 | Optical and Microwave communication (2003Course)(Th) |
| 404225 | Elective-II | | Elective-II |
| | Advanced Communication Systems (Th) (TW)(PR) | 404185 | Mobile Communication (E-II) (Th) |
| | Digital Image Processing(Th) (TW)(PR) | 404184 | Digital image processing (E-I) (Th) (TW)(PR) |
| | Biomedical Engineering(Th) (TW)(PR) | | Biomedical Engineering(2003 Course)(Th) (TW)(PR) |
| | Audio and video Engineering(Th) (TW)(PR) | 404189 | Television and Video Engineering(E-III) (Th) (TW)(PR) |
| | System programming and operating systems (Th)(TW)(PR) | | System programming and operating systems (2003Course) (Th) (TW)(PR) |
| 404226 | Communication Lab-II(PR) | | Communication Lab-II(2003 Course)(PR) |
| 404221 | Project(TW)(OR) | 404191 | Project part-II(TW)(OR) |

UNIVERSITY OF PUNE
B.E. (COMPUTER ENGINEERING) - 2003 COURSE
Equivalence To 2008 Course Revised

| Subject Code | Subject Name 2003 Course | Subject Code | Subject Name 2008 Course |
|----------------|--|------------------------|--|
| Term-I | | | |
| 410441 | Design & Analysis of Algorithms | 410441 | Design & Analysis of Algorithms |
| 410442 | Operating Systems | 310252 | Systems Programming and Operating Systems Semester-II, TE 2008 Course |
| 410443 | Object Oriented Modeling & Design | 410443 | Object Oriented Modeling & Design |
| 410444 | Principles of Compiler Design | 410442 | Principles of Compiler Design |
| 410445 | Elective I | | |
| | Image Processing | 410444 Elective -I | Image Processing |
| | Advanced Databases | 410450 Elective-III | Advanced Databases |
| | Artificial Intelligence | 410444 Elective -I | Artificial Intelligence |
| | Multimedia Systems | 410445 Elective-II | Multimedia Systems |
| 410446 | Computer Laboratory I | 410446 | Computer Laboratory-I |
| 410447 | Project Work | 410447 Semester-I | Project Work |
| Term II | | | |
| 410448 | Networks and Information Security | 410451 Elective-IV | Information Security |
| 410449 | Advanced Computer Architecture and Computing | 410449 | Advanced Computer Architecture |
| 410450 | Software Testing and Quality Assurance | 410450 Elective-III | Software Testing and Quality Assurance |
| 410451 | Elective II | | |
| | Distributed Systems | 410448 | Distributed Operating Systems |
| | Software Architecture | 410444 Elective -I | Software Architecture |
| | Embedded Systems | 410445 Elective-II | Embedded Systems |
| | High Performance Networks | 410450 Elective-III | High Performance Networks |
| 410452 | Computer Laboratory II | 410452 | Computer Laboratory II |
| 410447 | Project Work | 410447 Semester-II | Project Work |

University of Pune

Equivalence for B.E. Electrical 2003 Course

B.E. Electrical 2003 Course
Course

Equivalent B.E./T.E. Electrical 2008

| Sr. No | Subject Code | Subject Name | Head | | Sr. No | Subject Code | Subject Name | Head |
|--------|------------------------|----------------------------------|----------|---|--------|--|--------------------------------------|----------|
| 1 | 403141 | Power System Operation & Control | PP OR | → | 1 | 403142 | Power System Operation & Control | PP OR |
| 2 | 403142 | Utilization of Electrical Energy | PP | → | 2 | 303147 | Utilization of Electrical Energy | PP |
| 3 | 403143 (Elective I) | Robotics and Automation | PP | → | 3 | 403143 | Robotics and Automation (Elective I) | PP |
| | | Power Quality | PP | → | 403143 | Power Quality (Elective I) | PP | |
| | | Illumination Engineering | PP | → | 403143 | Illumination Engineering (Elective I) | PP | |
| | | Project Management | PP | → | 403143 | Project Management (Elective I) | PP | |
| | | Restructuring and Deregulation | PP | → | 403144 | Restructuring and Deregulation (Elective II) | PP | |
| 4 | 403144 | Industrial Drives and Control | PP PR | → | 4 | 403148 | Industrial Drives and Control | PP PR |
| 5 | 403145 | Control System II | PP OR | → | 5 | 403145 | Control System II | PP OR |
| 6 | 403147 | Energy Management | PP | → | 6 | 303146 | Energy Audit and Management | PP |
| 7 | 403148 | Switchgear and Protection | PP OR | → | 7 | 403147 | Switchgear and Protection | PP OR |
| 8 | 403149 | Digital Control System | PP | → | 8 | 403150 | Digital Control System (Elective IV) | PP |
| 9 | 403149 | Digital Control System | OR | → | 9 | | To be continued | |

| | | | | | | | | | |
|----|-------------------------|------------------------------|--------|---------|----|--------|--|----|--|
| 10 | 403150 (Elective II) | VLSI Design | PP | | 10 | 403149 | VLSI Design (Elective III) | PP | |
| | | VLSI Design | PR | ⇓ | | | To be continued | | |
| | | High Voltage Engineering | PP | ⇓ | | 403149 | High Voltage Engineering (Elective III) | PP | |
| | | High Voltage Engineering | PR | ⇓ | | | To be continued | | |
| | | Digital Signal Processing | PP | ⇓ | | 403149 | Digital Signal Processing (Elective III) | PP | |
| | | Digital Signal Processing | PR | ⇓ | | | To be continued | | |
| | | ANN & its Applications | PP | ⇓ | | 403149 | ANN & its Applications (Elective III) | PP | |
| | | ANN & its Applications | PR | ⇓ | | | To be continued | | |
| | | Project | Or | ⇓ | | 403146 | Project | Or | |
| | | | | | | | | | |
| | | 11 | 403146 | Project | Or | | | | |

PP:- Theory Paper

PR:- Practical

OR:- Oral

Note:- For Practical/Oral equivalence, candidate can use TW of 2003 course.

B. E. Instrumentation & Control Equivalence

| 2003 Course | | 2008 Course | | |
|--------------|--------------|---|--------------|-------------------------------------|
| SEMESTER- I | | | | |
| Sr.no | Subject code | Subject | Subject Code | Subject |
| 1. | 406261 | Process Instrumentation-I | 406261 | Process Instrumentation |
| 2. | 406262 | Project Engineering And Management | 406263 | Project Engineering and Management |
| 3. | 406263 | Digital Control | 406262 | Digital Control |
| 4. | 406264 (A) | Biomedical Instrumentation | 406264 (A) | Biomedical Instrumentation |
| 5. | 406264 (B) | Instrumentation for Environmental Engineering | 406265 (A) | Environmental Instrumentation |
| 6. | 406264 (C) | Laser applications in Instrumentation | 406264 (B) | Laser based Instrumentation |
| 7. | 406264 (D) | Advanced Control system | 406264 (C) | Advanced Control system |
| 8. | | Building Automation-I | | Building Automation-I |
| 9. | 406265 | Project Presentation I | 406266 | Project Work |
| SEMESTER- II | | | | |
| 10. | 406267 | Process Instrumentation –II | 406267 | Process Dynamics and Control |
| 11. | 406268 | Computer Techniques And Applications | --- | --- |
| 10. | 406269 | Industrial Automation | 406268 | Industrial Automation |
| 12. | 406270 (A) | Advanced Biomedical Instrumentation | 406269 (A) | Advanced Biomedical Instrumentation |
| 13. | 406270 (B) | Power Plant Instrumentation | --- | --- |
| 14. | 406270 (C) | Fiber Optic Instrumentation | 406269 (B) | Fiber Optic Instrumentation |
| 15. | 406270 (D) | Process Modeling and Optimization | 406269 (C) | Process Modeling and Optimization |
| 16. | | Building Automation-II | | Building Automation-II |
| 17. | 406271 | Project | 406271 | Project Work |

**Subject Equivalence for Fourth Year of Engineering (Chemical Engineering), 2008 with 2003 Course
University of Pune**

| Code No | Name of subject, 2003 Structure | Code No | Name of subject, 2008 Structure |
|---|---|------------|--|
| Semester I | | | |
| 409341 | Elective I (With Seminar) | | Elective – I(With Seminar) |
| | Environmental Engineering | 409341 | Environmental Engineering |
| | Bioprocess Engineering | 409341 | Bioprocess Engineering |
| | Energy Conservation | 409349 | Energy Conservation In Chemical Process Industries(Elective-III) |
| | Polymer Technology | 409342 | Polymer Technology Elective II |
| | Catalysis | 409350 | Catalysis Elective – IV |
| | Advanced Separation Processes | 409342 | Advance Separation Processes, Elective II |
| | Petroleum Refining | 409342 | Petroleum Refining, Elective II |
| 409342 | Process Dynamics & Control Pr | 409343 | Process Dynamics and Control Pr |
| 409343 | Chemical Reaction Engineering II | 409344 | Chemical Reaction Engineering II |
| 409344 | Chemical Process Synthesis | 409342 | Chemical Process Synthesis Elective- II |
| 409345 | Process Equipment Design II oral | 409345 | Chemical Engineering Design II Oral |
| 409346 | Computer Aided Chemical Engineering II TW, Oral | 409346 | Computer Aided Chemical Engineering II Oral |
| 409347 | Project, TW | 409348 | Project, TW |
| Semester II | | | |
| 409348 | Elective II | | |
| | Computer Aided Process Control | 409350 | Computer Aided Process Control-Elective IV |
| | Food Technology | 409349 | Food Technology Elective III |
| | Advanced Materials | 409342 | Advanced Materials, Elective II |
| | Industrial Hazards & Safety | 409349 | Chemical Process Safety, Elective III |
| | Piping Design & Engineering | 409342 | Piping Design & Engineering, Elective II |
| | Fuel Cell Technology | 409350 | Fuel Cell Technology |
| | Petrochemical Engineering | 409350 | Petrochemical Engineering |
| 409349 | Process Modeling & Simulation, TW, Oral | 409351 | Process Modeling and Simulation, Tw, Oral |
| 409350 | Project Costing & Appraisal | -- | Exempted |
| 409351 | Chemical Plant Engineering, TW, Oral | 409352 | Process Engineering Costing & Plant Design, TW, Oral |
| 409347 | Project | 409348 | Project TW, Oral |
| <p>Note: The practical / oral examination of the candidate will be conducted based on the assignments performed and submitted by the candidate in his / her journal and not as per assignments in 2003 revised syllabus. This has to be brought to the notice of the examiners by the concerned Institutes.</p> | | | |
| | | | |

**Subject Equivalence for B E Polymer Engineering, 2003 with 2008 Course
University of Pune.**

| Code No. | Name of the Subject 2008 Structure | Code No. | Name of the subject 2003 Structure |
|----------------------|---------------------------------------|------------------|---|
| Semester – I | | | |
| 409361 | Polymer Compounding | -- | -- |
| 409362 | Mold & Die Design-I | 409364 | Mould & Die Design |
| 409363 | Polymer Processing Operation – II | 409369 | Polymer Processing Operations - II |
| 409364-A | Fiber Technology | 409367 | b. Fiber Technology |
| 409364-B | Mechanics of Composites | 409367 | c. Mechanics of Composites |
| 409364-C | Polymer Reaction Engineering | 409366 | a. Polymer Reaction Engineering |
| 409365-A | Production Planning and Control | 409370 | Industrial Management & Process Economics |
| 409365-B | Surface Coatings and Adhesives | 409366 | c. Surface Coating and Adhesive |
| 409365-C | Packaging Technology | 409367 | d. Packaging Technology |
| 409365-D | Open Elective | -- | -- |
| 409366 | Industrial training evaluation | -- | -- |
| 409367 | Project | 409365 | Project Work |
| Semester - II | | | |
| 409368 | Product Design & Polymer Testing | 409368 409371 | Product Design & Computer Applications Polymer Testing |
| 409369 | Mold & Die Design-II | -- | -- |
| 409370-A | Polymer Physics and Characterization | -- | -- |
| 409370-B | Processing of Composites | 409363 | Polymer Composites & Blends |
| 409370-C | Specialty Polymers & Applications | 409367 | a. Specialty Polymers |
| 409371-A | Advanced Polymer Rheology | 409366 | d. Advanced Polymer Rheology |
| 409371-B | Rubber Technology | 409366 | b. Rubber Technology |
| 409371-C | Polymer Thermodynamics and Blends | -- | -- |
| 409371-D | Open Elective | -- | -- |
| 409367 | Project | 409365 | Project Work |
| | | 409362 | Polymer Processing Operations - I |
| | | 409361 | Polymer structure & property relationship |

Faculty of Engineering
Board of Studies in Petroleum Engineering
Subjects Equivalence of 2003 course with 2008 course
B.E. (Petrochemical Engineering)

| Code No | Name of Subject, 2003 Structure | Code No | Name of Subject, 2008 Structure |
|----------------|--|---------|--|
| Term I | | | |
| 412401 | Refining Operations, Th, TW, PR | | To be continued |
| 412402 | Petrochemical Processes, Th, TW, OR | | To be continued |
| 412403 | Reaction Engineering – II, Th | | To be continued |
| 412404 | Process Dynamics and Control Th, TW, PR | 412402 | Process Dynamics and Control Th, TW, PR |
| 412405 | Elective – I | | |
| 1) | Environmental Engineering, Th, PR | 412403 | Environmental Engineering, Th, TW, PR |
| 2) | Novel Separation Processes, Th, PR | 412404 | Novel Separation Processes, Th, TW |
| 3) | Interface and Colloid Science, Th, PR | 412410 | Colloidal and Interface Science, Th |
| 412406 | Project Work | | To be continued |
| Term-II | | | |
| 412407 | Refinery Process Design, Th, TW, OR | 412408 | Refinery Process Design, Th, TW |
| 412408 | Natural Gas Technology, Th | 412405 | Natural Gas Technology, Th |
| 412409 | Process Economics and Project Engineering, Th, TW, OR | 412409 | Process Economics and Plant Design, Th, TW, OR |
| 412410 | Process Modeling, Simulation and Optimization, TW, OR | 412410 | Process Modeling and Simulation, Th |
| 412411 | Elective – II | | |
| 1) | Catalysis Technology and Fluidization Engineering, Th | 412405 | Catalyst Science and Technology, Th |
| 2) | Biochemical Engineering, Th | 412404 | Biochemical Engineering, Th |
| #) | Petroleum Exploration and Production Operations, Th | 412411 | Petroleum Exploration and Production Operations |
| 412406 | Project Work, TW, OR | 412407 | Project Work, TW, OR |

Note: The practical / oral examination of the candidate will be conducted based on the assignments performed and submitted by the candidate in his / her journal and not as per assignments in 2008 revised syllabus. This has to be brought to the notice of the examiners by the concerned Institutes.

Faculty of Engineering
Board of Studies in Petroleum Engineering
Subjects Equivalence of 2003 course with 2008 course
B.E. (Petroleum)

| Code no | Name of subject, 2003 Structure | Code no | Name of subject, 2008 Structure |
|---------|---|----------|---|
| | Term I | | |
| 412381 | Reservoir Engineering – I, Th | 412381 | Reservoir Engineering II, Th |
| 412382 | Petroleum Exploration, Th, Pr, | 412384 A | Petroleum Exploration, Th, Pr, |
| 412383 | Petroleum Formation Evaluation, Th, OR, TW | 412382 | Petroleum Formation Evaluation |
| 412385 | Elective – I | | |
| | Refining and Petrochemical Technology, Th | 412385 A | Petroleum Refining Technology Th |
| | Applied Computational Techniques, Th | 412384 C | Programming, Database Management and Information Systems in Petroleum Industry, Th |
| | Environmental Technology in Petroleum Industry, Th | 412389 D | Environment Technology and Safety in Petroleum Industry, Th |
| 412387 | Project Work | 412386 | Project |
| 412386 | Problems in Petroleum Engineering Design, PR | | exempt |
| | Term II | | |
| 412388 | Reservoir Engineering – II, Th | 412387 | Improved Oil Recovery and Reservoir Simulation, Th |
| 412389 | Petroleum Production Engineering – II, Th, Or | 412388 | Petroleum Production Engineering II, Th, Or |
| 412390 | Oil Well Drilling Engineering, Th,Or | 412389 A | Advanced Drilling Engineering, Th, Or |
| | Petroleum Economics, Th | 412390 A | Petroleum Economics Th |
| | Integrated Reservoir Management Th | | To continue |
| | Deepwater Technology Th | 412389 B | Deepwater Technology Th |
| 412387 | Project Work | 412386 | Project |

Note: The practical / oral examination of the candidate will be conducted based on the assignments performed and submitted by the candidate in his / her journal and not as per assignments in 2008 revised syllabus. This has to be brought to the notice of the examiners by the concerned Institutes.

Faculty of Engineering
Board of Studies in Petroleum Engineering
Subjects Equivalence of 2003 course with 2008 course
B.E. (Petroleum)

| Code no | Name of subject, 2003 Structure | Code no | Name of subject, 2008 Structure |
|---------|--|----------|--|
| | Term I | | |
| 412381 | Reservoir Engineering – I, Th | 412381 | Reservoir Engineering II, Th |
| 412382 | Petroleum Exploration, Th, Pr, | 412384 A | Petroleum Exploration, Th, Pr, |
| 412383 | Petroleum Formation Evaluation, Th, OR, TW | 412382 | Petroleum Formation Evaluation |
| 412385 | Elective – I | | |
| | Refining and Petrochemical Technology, Th | 412385 A | Petroleum Refining Technology Th |
| | Applied Computational Techniques, Th | 412384 C | Programming, Database Management and Information Systems in Petroleum Industry, Th |
| | Environmental Technology in Petroleum Industry, Th | 412389 D | Environment Technology and Safety in Petroleum Industry, Th |
| 412387 | Project Work | 412386 | Project |
| 412386 | Problems in Petroleum Engineering Design, PR | | exempt |
| | Term II | | |
| 412388 | Reservoir Engineering – II, Th | 412387 | Improved Oil Recovery and Reservoir Simulation, Th |
| 412389 | Petroleum Production Engineering – II, Th, Or | 412388 | Petroleum Production Engineering II, Th, Or |
| 412390 | Oil Well Drilling Engineering, Th, Or | 412389 A | Advanced Drilling Engineering, Th, Or |
| | Petroleum Economics, Th | 412390 A | Petroleum Economics Th |
| | Integrated Reservoir Management Th | | To continue |
| | Deepwater Technology Th | 412389 B | Deepwater Technology Th |
| 412387 | Project Work | 412386 | Project |

Note: The practical / oral examination of the candidate will be conducted based on the assignments performed and submitted by the candidate in his / her journal and not as per assignments in 2008 revised syllabus. This has to be brought to the notice of the examiners by the concerned Institutes.

Fourth Year Printing Engineering & Graphic Communication
Equivalence of BE 2003 Course with BE 2008 Course

| Sr. No | 2003 Course | | 2008 Course | |
|--------|------------------------|---|--------------------------|---|
| | Subject Code | Subject Name and Exam Head | Subject Code | Subject Name and Exam Head |
| 1 | Elective I 408281A | Newspaper Technology (Th) | Elective II 408282B | Newspaper Technology (Th) |
| 2 | Elective I 408281B | Flexible Packaging (Th) | Elective IV 408288A | Flexible Packaging (Th) |
| 3 | Elective I 408281C | Security Printing (Th) | Elective II 408282A | Security Printing (Th) |
| 4 | 408282 | Costing & Estimating and Project Management, Operations Research (Th/Tw) | 408290 | Print Production Planning & Control (Th/Tw) |
| 5 | 408283 | Surface Preparation II (Th/Tw/Pr) | 408283 | Same as 2003course - Surface Preparation II (Th/Tw/Pr) |
| 6 | 408284 | Offset machines II (Th/Tw/Pr) | 308286 | Offset Machines II (Th/Tw/Pr) (TE 2008 Course) |
| 7 | 408285 | Electronic Image setting (Th/Tw/Pr) | 308288 | Digital Workflow and Image setting (Th/Pr) (TE 2008 Course) |
| 8 | 408286 | Project (Tw/Or) | 408286 | Project (Tw/Or) |
| 9 | Elective II 408287A | Study of Advertising and Multimedia (Th/Pr) | 408285 | Advertising and Multimedia (Th/Pr) |
| 10 | Elective II 408287B | Study of Materials and Package Design (Th/Pr) | 408289 | Package Design and Technology (Th/Tw/Pr) |
| 11 | Elective II 408287C | Information Technology (Th/Pr) | Elective II 408287C | Same as 2003 course – Information Technology (Th/Pr) |
| 12 | Elective II 408287D | Image Conversion & Modification (Th/Pr) | Elective III 408287 C | Image Conversion and Modification (Th/Tw/Pr) |
| 13 | 408288 | Technology of Gravure and Flexography (Th/Tw/Pr) | 408288 | Same as 2003 course - Technology of Gravure and Flexography (Th/Tw/Pr) |
| 14 | 408289 | Assembly and Maintenance of Printing Machines (Th/Tw/Or) | Elective III 408287 B | Printing machine maintenance (Th/Tw/Pr) |
| 15 | 408290 | Substrate & Ink Technology (Th) | 408290 | Same as 2003 course- Substrate & Ink Technology (Th) |

**Subject Equivalence for Final Year of Engineering (Production/Production SW/Industrial)
University of Pune**

| 2003 Course for Production/ Production SW/Industrial | | 2008 Course for Production/Industrial Engineering | |
|---|--|--|---|
| Code No. | Name of Subject | Code No. | Name of Subject |
| Semester I | | Semester I | |
| 411082 | Machine Tool Design TH | 411081 | Machine Tool Design TH |
| 411083 | Manufacturing Automation and Control TH | 411082 | Manufacturing Automation TH |
| 411084 | Operations Research TH | 411083 | Operations Research TH |
| 411081 | Production Management TH | 411084 | Plastic Engineering TH |
| 411085 | Elective I TH | | Elective I TH |
| | i. Reliability Engineering | 411090 | Total Quality Management |
| | ii. Powder Metallurgy | 411084 | Powder Metallurgy (Elective I) |
| | iii. Plant Engineering. and Maintenance | 411085 | Plant Engineering. and Maintenance (Elective-II) |
| | iv. Material Handling and Engineering Design | 411085 | Materials and Logistic Management (Elective-II) |
| 411086 | Project Work | 411086 | Project Work |
| Oral | | Oral | |
| 411082 | Machine Tool Design | 411081 | Machine Tool Design |
| 411083 | Manufacturing Automation and Control | 411082 | Manufacturing Automation PR |
| Term Work | | Term Work | |
| 411082 | Machine Tool Design | 411081 | Machine Tool Design |
| 411084 | Operations Research | 411083 | Operations Research |
| 411081 | Production Management | 411084 | Plastic Engineering |
| Semester II | | Semester II | |
| 411086 | Project Work | 411086 | Project Work |
| 411087 | Material and Financial Management TH | 411090 | Material and Financial Management |
| 411088 | Process Planning and Tool Selection TH | 411088 | Process Planning and Tool Selection TH |
| 411089 | CAD/CAM/CIM TH | 411087 | Computer Integrated Design and Manufacturing TH |
| 411090 | Elective II TH | 411089 | Elective TH |
| | i. Robotics | 411084 | Industrial Robotics (Elective I) |
| | ii. Ergonomics and Human Factors in Engg. | 411085 | Ergonomics and Human Factors in Engg. (Elective-II) |
| | iii. Advanced Material Processing | 411089 | Metal Working & Tribology |
| | iv. Advanced Production Technology | 411090 | Intelligent Manufacturing Systems |
| Oral | | Oral | |
| 411086 | Project Work | 411086 | Project Work |
| 411088 | Process Planning and Tool Selection | 411088 | Process Planning and Tool Selection |
| 411089 | CAD/CAM/CIM | | Computer Integrated Design and Manufacturing PR |
| Term Work | | Term Work | |
| 411086 | Project Work | 411086 | Project Work |
| 411087 | Material and Financial Management | 411089 | Automobile Engineering |
| 411089 | CAD/CAM/CIM | 411089 | Finite Element Analysis |

BE (INDUSTRIAL ENGINEERING) Equivalence 2003 - 2008

| 2003 | | | | 2008 | | | |
|--------------------|-----------------------------------|--------------------|---------|------------|---------------------------------|---------|-------------|
| Semester I | | | | Semester I | | | |
| Subject | Subject | Examination Scheme | Subject | Subject | Examination Scheme | Subject | Subject |
| | | Th. Tw | Th. Tw | | Th. Tw | | |
| 411101 | Quantitative Techniques | 100 | 50 | 411003 | Quantitative Techniques | 100 | 50 |
| 411102 | Business Accounting & Costing | 100 | -- | 411101 | Financial Management and C | 100 | 50 |
| 411103 | Human Factors Engineering | 100 | 50 | 311009 | Ergonomics and Product Des | 100 | Exemption |
| 411104 | Logistics & Warehousing | 100 | -- | 411104 | Elective II - Logistics and Wa | 100 | 50 |
| 411105 | 1. Supply Chain Management | 100 | -- | 411110 | Elective III Supply Chain Man | 100 | -- |
| 411005 | 2. Simulation Modeling & Analysis | 100 | -- | 311104 | Computer Programming and | 100 | -- |
| 411105 | 3. Units Operations | 100 | -- | 411110 | Elective III Process Planning & | 100 | -- |
| 411105 | 4. Project Management | 100 | -- | 411102 | Project Management | 100 | -- |
| 411106 | Project Work** | -- | -- | 411106 | Project Work | -- | -- |
| Semester II | | | | | | | |
| Subject | Subject | Examination Scheme | Subject | Subject | Examination Scheme | Subject | Subject |
| | | Th. Tw | Th. Tw | | Th. Tw | | |
| 411107 | Project Work | -- | 100 | 411112 | Project Work | -- | 100 |
| 411108 | Flexible Manufacturing Systems | 100 | 25 | 411105 | Elective II World Class Manu | 100 | Engineering |
| 411109 | Adv. Manufacturing Processes | 100 | 25 | 411110 | Elective III Manufacturing At | 100 | Exemption |
| 411110 | Energy Management | 100 | -- | 411109 | Energy Management | 100 | -- |
| 411111 | 1. Entraprenurship development | 100 | -- | 411105 | Elective II Development of P | 100 | -- |
| 411111 | 2. Plastics Engineering | 100 | -- | 411111 | Elective IV Plastics Engineeri | 100 | -- |
| 411111 | 3. Industrial & Commercial Laws | 100 | -- | 411110 | Elective III IE Applications in | 100 | -- |
| 411111 | 4. Material Logistic | 100 | -- | 411104 | Elective I Logistics and War | 100 | -- |

31112 Materials Mana