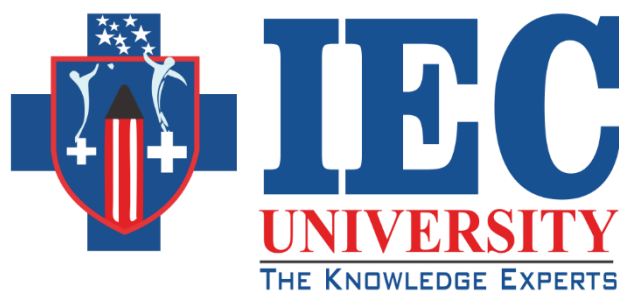


Schemes and Syllabus

(For academic session 2023-24 & onwards)

B. Voc. in Plumbing



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SECTION 1

Program Outcomes and Program Specific Outcomes

Program Outcomes

PO1: Professional Knowledge: It helps the students to train on subjects Professional Skill, Professional Knowledge, Engineering Drawing, Workshop Science & Calculation and Employ-ability Skills related to job role.

PO2: Research/Project Orientation: The program helps students to recognize and apply basic research methods to different training in plumbing.

PO3: Entrepreneurship Capability: It helps the students to develop their ethical and social value.

PO4: Conformist: Relating political, social, cultural, historical issues as affecting life of the individual, group and society.

PO5: Critical Thinking Mindset: Students will develop their critical thinking skills to analyze and evaluate the ways in which social scientists to examine the world.

PO6: Leadership and Teamwork: Student will learn about the leadership traits and conformity of a group and how to work as a team all these traits will be developed through the study.

PO7: Professional Ethics: It will help the students to recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.

PO8: Professional Empowerment: Student is entrusted to make/do project work and Extra Curricular Activities to build up confidence.

PO9: Communication: It will help the students the ability to communicate to other about their viewpoints and connecting peoples by exchange ideas and opinions

PO10: Social Responsibility and Environmental Conservation: It will help the students to understand the issues of environmental contexts and the importance of environment conservation and social responsibility.

PO11: Modern Analytical Knowledge: Inculcate among students an ability to determine modern issues and outlook for their solutions.

PO12: Life Long Skills: Acquire the ability to engage in independent and life-long learning in the broadest context socio-political changes.

Program Specific Outcomes

PSO1: Plan and organize the work to make job as per specification applying different types of basic fitting operation and Check for dimensional accuracy following safety precautions. [*Basic fitting operation – marking, Hack sawing, Chi-selling, Filing, Drilling, Taping and Grinding etc. Accuracy: $\pm 0.25\text{mm}$*]

PSO2: Perform Inner & Outer Thread cutting on Metal & Studs and thread cutting on different types of pipes & fittings accessories.

PSO3: Install and maintain different Electric pumps.

PSO4: Join fittings for different purposes on PVC pipe line.

SECTION 2

Semester wise Scheme

First Semester

| Course Code | Course Title | L | T | P | CH | CP | Int. A | ESE | Total |
|----------------------|--------------------------------------|-----------|----------|-----------|-----------|-----------|------------|------------|------------|
| B. Voc. Plumbing-101 | Basics of Computer | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-102 | General description of Plumbing | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-103 | Plumbing hand tools | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-104 | OJT-I (On Job Training NSQF Level-4) | - | - | 36 | 36 | 18 | 300 | 200 | 500 |
| | TOTAL | 12 | - | 36 | 48 | 30 | 480 | 320 | 800 |

Second Semester

| Course Code | Course Title | L | T | P | CH | CP | Int. A | ESE | Total |
|----------------------|---------------------------------------|-----------|----------|-----------|-----------|-----------|------------|------------|------------|
| B. Voc. Plumbing-201 | Professional Communication | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-202 | Mason's hand tools | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-203 | Composition of water | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-204 | OJT-II (On Job Training NSQF Level-5) | - | - | 36 | 36 | 18 | 300 | 200 | 500 |
| | TOTAL | 12 | - | 36 | 48 | 30 | 480 | 320 | 800 |

Third Semester

| Course Code | Course Title | L | T | P | CH | CP | Int. A | ESE | Total |
|----------------------|---------------------------|-----------|----------|-----------|-----------|-----------|------------|------------|------------|
| B. Voc. Plumbing-301 | Environment Studies | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-302 | Theory of Carpenter works | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-303 | Theory of Gas Welding | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-304 | OJT-III (On Job Training) | - | - | 36 | 36 | 18 | 300 | 200 | 500 |
| | TOTAL | 12 | - | 36 | 48 | 30 | 480 | 320 | 800 |

Fourth Semester

| Course Code | Course Title | L | T | P | CH | CP | Int. A | ESE | Total |
|----------------------|---------------------------------------|-----------|----------|-----------|-----------|-----------|------------|------------|------------|
| B. Voc. Plumbing-401 | Human Values & Ethics | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-402 | Description of pipe works | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-403 | Description of cocks | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-404 | OJT-IV (On Job Training NSQF Level-6) | - | - | 36 | 36 | 18 | 300 | 200 | 500 |
| | TOTAL | 12 | - | 36 | 48 | 30 | 480 | 320 | 800 |

Fifth Semester

| Course Code | Course Title | L | T | P | CH | CP | Int. A | ESE | Total |
|----------------------|----------------------------|-----------|----------|-----------|-----------|-----------|------------|------------|------------|
| B. Voc. Plumbing-501 | Disaster Management | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-502 | Domestic drainage system | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-503 | Industrial drainage system | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-504 | OJT-V (On Job Training) | - | - | 36 | 36 | 18 | 300 | 200 | 500 |
| | TOTAL | 12 | - | 36 | 48 | 30 | 480 | 320 | 800 |

Sixth Semester

| Course Code | Course Title | L | T | P | CH | CP | Int. A | ESE | Total |
|----------------------|--|-----------|----------|-----------|-----------|-----------|------------|------------|------------|
| B. Voc. Plumbing-601 | Current Affairs | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-602 | Description of sanitary fittings | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-603 | Description of Billing in plumbing works | 4 | - | - | 4 | 4 | 40 | 60 | 100 |
| B. Voc. Plumbing-604 | OJT-VI (On Job Training NSQF Level-7) | - | - | 36 | 36 | 18 | 300 | 200 | 500 |
| | TOTAL | 12 | - | 36 | 48 | 30 | 480 | 320 | 800 |