

INSTITUTE OF TECHNOLOGY & MANAGEMENT GWALIOR • MP • INDIA "THINK BIG... THINK BEYOND"



# INTERNAL QUALITY ASSURANCE CELL (QAC) IMPLEMENTATION FRAMEWORK FOR OUTCOME-BASED EDUCATION (OBE)



## **1. INTRODUCTION**

Outcome-Based Education (OBE) is a student-centric approach to teaching and learning that emphasizes achieving specific learning outcomes. The Internal Quality Assurance Cell (IQAC) at ITM, Gwalior is committed to implementing OBE to enhance the quality of education, ensure compliance with NAAC accreditation standards, and align with the National Education Policy (NEP) 2020.

## 2. OBJECTIVES

- Structured Framework: Establish a systematic framework for OBE implementation across all academic programs.
- Outcome Alignment: Align course learning outcomes with graduate attributes and program objectives.
- Student Development: Enhance student engagement, competency development, and employability.
- Continuous Assessment: Integrate assessment methods and feedback mechanisms to improve learning outcomes.

## 3. Key Components of OBE Implementation

#### **3.1 Program Educational Objectives (PEOs)**

PEOs define what graduates are expected to accomplish a few years after graduation. These objectives align with industry requirements, societal expectations, and global standards.

#### **3.2 Program Outcomes (POs)**

POs define broad capabilities that students must acquire by graduation. These are mapped to national accreditation criteria (e.g., NBA Graduate Attributes) and industry demands.

## **3.3 Course Outcomes (COs)**

Each course shall have well-defined COs specifying the knowledge, skills, and attitudes students should acquire. COs must be:

- Measurable and Specific
- Mapped to POs through AICTE exam reform policy
- Evaluated through direct and indirect assessment tools

## 3.4 Program Specific Outcomes (PSOs)

PSOs are the unique outcomes expected from a specific program, focusing on specialized knowledge and skills. These outcomes define what students should be able to do upon completing their specific degree programs. PSOs are:

- Aligned with industry-specific skills
- Integrated with POs for comprehensive learning
- Assessed through practical and project-based evaluation

## **3.4 OBE Curriculum Design**

Curriculum development shall follow an outcome-based structure by incorporating:

- Constructive alignment of PEOs, POs, and COs.
- Active learning methodologies (e.g., problem-based learning, case studies, simulations).
- Integration of interdisciplinary and research-based learning..



## **3.5 Teaching-Learning Process**

Faculty shall adopt student-centered pedagogies such as:

- Experiential learning.
- Participative learning.
- Problem solving.
- Industry oriented courses.

#### **3.6 Assessment and Evaluation**

Assessment strategies focus on direct and indirect methods:

- Direct Assessments: Assignments, quizzes, project work, laboratory exercises.
- Indirect Assessments: Student feedback, employer surveys, alumni input.
- Rubric-Based Grading: Used to measure CO-PO attainment.

#### 3.7 Continuous Quality Improvement (CQI)

- The implementation of OBE will be continuously reviewed through:
- Periodic curriculum revision meetings.
- Analysis of student performance data.
- Faculty development programs (FDPs) on OBE best practices.
- Feedback loops from stakeholders.

## 4. ROLES AND RESPONSIBILITIES

#### 4.1 Role of IQAC

- Monitor and guide OBE implementation.
- Conduct regular audits of CO-PO mapping.
- Organize workshops and FDPs on OBE practices.
- Ensure compliance with accreditation and regulatory requirements.

## 4.2 Role of Faculty

- Develop and align course content with defined learning outcomes.
- Use innovative teaching-learning methodologies.
- Conduct assessments based on defined rubrics.

## 4.3 Role of Students

- Engage actively in OBE-based learning activities.
- Provide feedback on learning experiences.

#### **4.4 Role of Administration**

- Provide necessary infrastructure and resources.
- Facilitate training and development programs for faculty.



## **5. ACTIVITIES REQUIRED TO IMPLEMENT OBE**

| S. No. | Activity                               |
|--------|--|
| 1      | Faculty training on OBE                |
| 2      | Define and refine PEOs, POs, COs       |
| 3      | Curriculum restructuring and alignment |
| 4      | Implementation and monitoring          |
| 5      | Review and continuous improvement      |

## 6. CONCLUSION

The successful implementation of OBE at ITM, Gwalior will ensure improved student learning outcomes, enhance institutional credibility, and meet accreditation requirements. IQAC will play a pivotal role in ensuring the effective execution and periodic review of the OBE framework to foster academic excellence.

## **Dean IQAC**

ITM, Gwalior