

Ref: ITMU/DAO/2020-21/1021

Dated: 02-05-2021

Academic Audit (2020-2021)

Prof. (Dr.) Ranjeet Singh Tomar, Professor SOET, Chairman Members (Subject Experts):

- Prof. Shyam Akashe, Professor, SOET
- Prof. Richa Kothari, Professor, SOS
- Prof. Indu Mazumdar, Professor, SOSE
- Prof. Subodh Kumar Dubey, Professor, SOP
- Prof. Mukesh Kumar Pandey, Professor, SOET
- Prof. Sonia Johri, Professor, SOS
- Dr. Mini Anil, Professor, SONS
- Dr. Shama Parveen, Associate Professor, SOAG
- · Dr. Shivom Singh, Associate Professor, SOS
- Mr. Keshav Kansana, Associate Professor, SOM
- Dr. Vandana Bharti, Associate Professor, SOM

Schedule of Academic Audit:

The schedule for the Academic Audit is planned as follows:

| S. No. | School | Pre Session | Mid Session | End Session | Academic Review Committee |
|-----------|--------|-------------|-------------|-------------|---|
| 1 | SOET | 06-07-2020 | 23-11-2020 | 22-04-2021 | 1. Prof. Ranjeet Singh Tomar |
| | | | | | 2. Dr. Vandana Bharti |
| | | | | | 3. Prof. Mukesh Kumar Pandey |
| 2. | SOM | 07-07-2020 | 24-11-2020 | 23-04-2021 | 1. Prof. Ranjeet Singh Tomar |
| | | | | | 2. Prof. Shyam Akashe |
| | | | | | 3. Dr. Vandana Bharti |
| 3. | SOS | 08-07-2020 | 25-11-2020 | 24-04-2021 | 1. Prof. Ranjeet Singh Tomar |
| | | | | | 2. Prof. Subodh Kumar Dubey |
| | | | | | 3. Dr. Richa Kothari |
| 4. | SOP | 09-07-2020 | 26-11-2020 | 26-04-2021 | Prof. Ranjeet Singh Tomar |
| | | | | | 2. Dr. Shivom Singh |
| | | | | | Prof. Subodh Kumar Dubey |
| 5. | SOSE | 10-07-2020 | 27-11-2020 | 27-04-2021 | Prof. Ranjeet Singh Tomar |
| | | | | | 2. Dr. Keshav Kansana |
| | | | | | 3. Prof. Indu Mazumdar |
| 6. | SONS | 11-07-2020 | 28-11-2020 | 28-04-2021 | Prof. Ranjeet Singh Tomar |
| | | | | | 2. Prof. Sonia Johri |
| | | | | | 3. Prof. Mini Anil |



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| 7 | SOAG | 13-07-2020 | 30-11-2020 | 29-04-2021 | 1. | Prof. Ranjeet Singh Tomar |
|---|------|------------|------------|------------|----|---------------------------|
| | | | | | 2. | Prof. Sonia Johri |
| | | | | | 3. | Dr. Shama Parveen |

Report of Academic Audit of School of Engineering & Technology (SOET) (2020-2021)

Preface:

The academic audit of teaching schools / departments of ITM University, Turari campus was conducted (online) by the Audit Team as per the order issued by Hon'ble Vice Chancellor vide letter no 1893 Dated February 16, 2021. For the effectiveness of the academic audit, the audit team was separate for the two campuses i. e. Sithouli and Turari. The committee constituted of a Chairman who is Senior Professor of Engineering & Technology and members of the various schools who were subject experts.

The main objective of the academic audit was to ascertain the presence and adequacy of the quality benchmark of various parameters stipulated by National Assessment and Accreditation Council.

Documents to be verified:

- 1. Adherence to Academic Calendar
- 2. Number of faculty members in the school
- 3. Cadre ratio in the school
- 4. Load distribution of the semester/trimester/annual
- 5. Time Table
- 6. Course files
- 7. Quality of assignments given to the students
- 8. Quality of midterm and end term examinations
- 9. Feedback collected and ATR
- 10. Attainment of CO, PO, PSO and PEO
- 11. Up-gradation of Syllabus if required
- 12. Status of equipment and consumables in the Laboratory

The audit teams held separate meetings with the Dean and members of the faculty. The reports are compiled and appended.

The audit parameters were categorized under various categories as follows.

Pre-Semester Audit:

- Steps followed in the designing of syllabus and curriculum.
- Submission of BOS minutes in Dean Academics office with proof of changes made in the curriculum and syllabus.



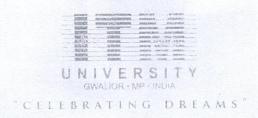
- > POs embedded in the curriculum and COs embedded in the syllabus of each subject.
- Assignment of all the subjects to teachers at least 15 days prior to the commencement of Semester, Trimester or year (while assigning the subject the choice of the subject by the faculties to be taken into consideration by subsequent meeting and discussion).
- > Release of Academic calendar and its alignment with the University Calendar.
- ➤ Internal assessment components, marks allocated, Quality of Mapping to COs-Uniqueness.
- Uploading the schemes on MIS portal prior to the commencement of new semester.

During Semester Audit:

- > Selection of teaching pedagogy and use of appropriate teaching aids.
- Conduction of continuous assessment components as per the schedule, evaluation of answer sheets and showing the evaluated answer sheets to the students.
- > Evaluation of student's progress, communicating the progress to the parents and conducting parent-teacher meetings.
- > Monitoring students' attendance and communicating the same to the parents.
- > Planning and conduction of workshops included in the curriculum as per the schedule announced in the academic calendar.
- > Allocating students to the teachers for Research Projects, finalizing topics for research.
- > Preparing students' support system planning remedial and coaching classes.
- ➤ Completing the internal assessment, evaluating answer sheets, assignments and projects and showing the evaluated sheets to the students.
- > Uploading the marks on MIS at least 7 days prior to the commencement of term-end examination.
- > Ensuring the implementation of the Examination eligibility rules based on attendance and internal assessment.
- > Collecting Feedback from the students.
- > Steps taken according to the feedback.
- > E-learning modules follow up and ensuring examination is conducted on time.
- > Ensuring that the Research Projects are submitted and evaluated on time.
- > Submission of research papers or patents on the basis of Research Projects.
- > Release of time table, frequency of changes in time table.
- Uploading the events and research work (research papers, patents and chapters etc.) on MIS portal.

End of Semester/Trimester Audit:

- Preparation of Question Papers with embedded COs and Blooms Levels.
- > Evaluation of Answer Sheets within ten days of the completion of examination.



Declaration of results within 15 days of the completion of examination.

Audit of the Students Profile:

- > Demand ratio (Applications received Vs Sanctioned Strength).
- ➤ Attendance records Quality of Records maintained, average attendance, cut off attendance for mid-term and end term Exams.
- > Students' involvement in extra-curricular & Co- curricular activities.
- > Records of the Study tour / industrial visits / exhibitions / Internship / Training.
- Records of the Students Achievements.
- > Records of the Final Placement, higher education and Entrepreneurship of the Students.
- > Analysis of the Final placements and identification of weak areas, strategies for improvement.

School of Engineering & Technology (SOET):

The Academic Audit committee reviewed the Academic progress of the School of Engineering & Technology (SOET) which included the syllabus, faculty status, employability of the course, facilities available etc. The Dean gave a brief outline of the courses and its prospects.

The school offers following courses:

- 1. B. Tech. (Computer Science & Engineering)
- 2. B. Tech. (Mechanical Engineering)
- 3. B. Tech. (Civil Engineering)
- 4. B. Tech. (Electronics & Communication Engineering)
- 5. B. Tech. (Electrical Engineering)
- 6. BCA/BCA (Hons.)
- 7. MCA
- 8. Ph.D. (Engineering)



| | | Verification | | Suggestions for | |
|-----------------------|--|--------------|--------------------------------|--|--|
| Criterion | Items | Yes / No | Comments | improvement | |
| | Steps followed in the designing of syllabus and curriculum | Yes | Supporting documents presented | 1. Elective courses to be approved in BOS. 2. Feedback reports | |
| Pre-Semester Audit | Submission of BOS minutes in Dean Academics office with proof of changes made in the curriculum and syllabus | Yes | Submitted | | |
| | POs embedded in the curriculum and COs embedded in the syllabus of each subject | Yes | Seen COs and POs in curriculum | Suggested to submit the copy of each syllabus t the Dean Academic Office | |



| PBL, ABCA and Assignments of all the subjects to teachers at least 15 days prior to the commencement of Semester, Trimester or year (while assigning the subject the choice of the subject by the faculties to be taken into consideration by subsequent meeting and discussion) | Yes | Subject distribution is done | Periodically review the subject assignments on LMS |
|--|-----|--|---|
| Release of Academic calendar and its alignment with the University Calendar | Yes | School Calendar is aligned with University Academic Calendar | Suggested to overcome the delay in execution (due to online mode) |



| | Internal assessment – components, marks allocated, Quality of Mapping to COs – Uniqueness | Yes | Mapping of COs and POs is done in the midterm assessment | CO -PO Mapping also included in the other assessment |
|-----------------------------|---|-----|--|---|
| During Semester Audit | Selection of teaching pedagogy and use of appropriate teaching aids I. Case studies II. Role Playing III. Simulations IV. Technology Enhanced Learning V. Collaborative Learning VI. Cross-Disciplinary Learning VII. Online Guest Lectures VIII. Seminar Presentations | Yes | I. Simulations II. Technology Enhanced Learning III. Collaborative Learning IV. Online Guest Lectures V. Seminar Presentations | Use online teaching pedagogy according to the subject |



| Conduction of continuous assessment components as per schedule, evaluation of answer books and showing the evaluated answer sheets to the students | | Conducted as per schedule defined | |
|--|-----|-------------------------------------|--|
| Evaluation of student's progress, communicating the progress to the parents and conducting parent-teacher meetings | Yes | Parent Teacher Meeting Conducted | Teachers have to identify the strong and weak point of every students and discuss with the parents in the online PTM |
| Monitoring students' attendance and communicating to the parents | Yes | Documentary evidence provided | |



| 1 | Planning and conduction of workshops included in the curriculum as per the schedule announced in the academic calendar | Yes | Conducted online as per the schedule | |
|---|--|------------|--------------------------------------|----------------------------|
| | Allocating students to the teachers for Research Projects, finalizing topics for research | Yes | Documents Presented | |
| | Preparing students' support system – planning remedial and coaching classes | Yes | Conducted online remedial classes | |
| | Completing the internal assessment (PBL/ABCA), evaluating answer sheets, assignments and projects and showing the evaluated sheets to the students | In-process | Progress Satisfactory | More follow up is required |



| uploading the marks on MIS at least 7 days prior to the commencement of end-term examination | In-process | Uploaded | More Follow up is required |
|--|------------|---|---|
| Ensuring the implementation of the Examination eligibility rules based on attendance and internal assessment | Yes | As per guidelines | |
| Collecting Feedback from students: I. Content Based Feedback a. Alumni b. Student c. Faculty d. Entrepreneur II. Student Satisfaction Survey (SSS) | Yes | Evidence provided | ATR to be submitted by the Dean of School |
| Steps taken on the feedback of students and faculty | Yes | Feedback collected through MIS and analyzed | ATR needs to be submitted |



| E-learning modules — follow up and ensuring examination is conducted on time | Yes | Followed as per schedule | More Follow up is required |
|--|-----|-----------------------------------|---|
| Ensuring that the Research Projects are submitted and evaluated on time | Yes | Proof provided regarding progress | More Follow up is required |
| Submission of research papers or patents on the basis of Research Projects | Yes | Proof presented | Motivation and follow up is required to increases the number of publication |
| Release of time table, frequency of changes in time table | Yes | 2-3 times in a semester | |
| | | | |



CILEBRATING DREAMS

| End of Semester/Tri mester Audit | Preparation of Question Papers with embedded COs and Blooms Levels | Yes | Submitted to Exam Cell | Proper instructions must be provided to the faculty members for the preparation of question papers with embedded COs and Blooms Level |
|--|--|-----|---|---|
| mester Audit | Evaluation of Answer Sheets within ten days of the completion of examination | Yes | Partially evaluated | Proper instructions must be provided to the faculty members to evaluate the answer sheets within deadlines |
| | Declaration of results within 15 days of the completion of examination | | | More Follow up is required |
| Audit of the Students Profile | Demand ratio (Applications received Vs Sanctioned Strength) | >1 | Interview to be conducted to screen good students | |



| | Attendance records – | 60-70% | Needs to be improved | |
|--------------|----------------------------|-----------------|---------------------------|--|
| | Quality of Records | 00 7070 | receds to be improved | |
| | maintained, average | | | |
| | attendance, cut off | | | |
| | attendance for mid-term | | | |
| | and end term Exams. | | | |
| | Students' involvement in | Yes | Students participation to | |
| A CONTRACTOR | extra-curricular & Co- | | be improved in co- | |
| | curricular activities | | curricular activities | |
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| | Records of the Study tour | Yes, | Documents presented | |
| | / industrial visits / | participated in | bocuments presented | |
| | exhibitions / Internship / | Internships | | |
| | Training | and Training | 3 | |
| | 114111116 | (Online) | | |
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| | Records of the Students | Yes | Evidence provided | |
| | Achievements | | | |
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|--------------------------|---|-----|---|---|
| | Records of the Final Placement, higher education and Entrepreneurship of the Students | Yes | Evidence provided | |
| | Analysis of the Final placements and identification of weak areas, strategies for improvement | Yes | Planned, needs improvement in documentation | |
| | Uploading of Schemes | Yes | Uploaded | Should be uploaded before the beginning of the semester |
| Uploads on MIS Portal | Events | Yes | Uploaded | Upload reports on MIS |
| | Research Work: I. Research Paper II. Patents III. Chapters | Yes | Uploaded | Every research related data should be on MIS |

Recommendation of Academic Audit:

Pre- Semester Audit:

 Uploading all the schemes on MIS portal prior to the commencement of new semester.



- Percentage change in the syllabus needs to be mentioned.
- CO-PO mapping needs to be done with articulation matrix.
- The minutes of the meeting for subject allocation need to be prepared.
- The academic calendar is aligned with the University Calendar but needs to be uploaded on MIS.
- PBL, ABCA activities and assignment schedule along with the submission date needs to be uploaded on LMS.
- The next BOS meeting needs to be done by end of May 2021 so that it can be approved in Academic Council meeting. PO and CO will be embedded and updated in this upcoming BOS.
- Session plan should be duly prepared and approved by competent authority.
- Notice to be issued by the Dean for viewing of answer sheets after evaluation and the dates should be mentioned in the notice on MIS and notice board.

During Semester Audit:

- Selection of teaching pedagogy and pedagogical tools were used in the curriculum but needs to be strengthened. The Dean has assured its implementation. Some activities were suggested.
- It was suggested that the parents should come at anytime during the session if not available on a particular date of PTM. An online meeting may also be arranged for the same.
- Student support system needs to be strengthened. A separate record needs to be prepared for remedial classes.
- Steps taken in accordance with the feedback needs to be mentioned. The student feedback both curriculums based and institutional should be analyzed by the Deans and ATR to be prepared and implemented.
- The department has good research facilities. Faculties are involved in the research publications. More motivation is required for publications. Few publications by the faculty are listed. Affiliation of ITM University is mandatory if the publication needs to be apprised.
- Uploading the schedule of events on MIS portal prior to the commencement of new semester. After conduction of events, event report is also uploaded on MIS portal.
- Uploading the research work (research papers, patents and chapters etc.) on MIS portal whenever they got published.

End Semester audit:

- CO PO and Blooms taxonomy levels will be embedded in the curriculum and in the question papers.
- Follow up should be required to declare the result within time limit. Committee has suggested declaring the result within 15 days after completion of examinations.

Students Profile:

Cut off attendance was 60-70% in the school for appearing in midterm and end term



which will be gradually increased.

- Policy for student benefits regarding attendance if a student gets involved in cocurricular/extracurricular activities should be floated.
- Record of the Students achievements in terms of placement is maintained in the school.
- Data of the students reported to be employed after successful completion of the course needs to be maintained by alumni coordinator.
- The training and placement coordinator needs to mention new strategies for improvement in final placement statistics.
- The examination pattern may be reformed with due permission from academic council. One midterm may be conducted in online mode for students' benefit and facilitation of the teachers.
- MOOC/ SWAYAM platform may also be adopted for pre-final and final year students.

Prof. Mukesh Kumar Pandey

Member

Dr. Vandana Bharti

Member

Dr. Ranjeet Singh Tomar

School of Engg. & Tech ITM University

Gwalior

Dr. Omveer Singh

Registrar

REGISTRAR ITM UNIVERSITY Gwalior (M.P)