## Report of Internal Academic Audit 2023

## 1. Executive summary

The internal academic audit was conducted from 21$^{st}$ July to 30$^{th}$ July 2023 as per circular issued to all concerned on 17$^{th}$ July 2023. All the faculty members were requested to provide either hard copy or upload the course book documents for their respective courses in the revised format as supplied by the Associate Dean QA. Heads of Departments/ Department Academic coordinator/FY coordinator were informed to ensure availability of these documents for the auditors. It was instructed to present previous three semester coursebooks for the courses offered by them.

A pre-audit meeting was conducted on Wednesday, 19$^{th}$ July, 3 30 pm at the conference hall for the internal academic auditors to comprehend with guidelines/rubrics for assessing the quality of academic data and to ensure uniformity in assessment of audit documents. The audit was conducted by the designated auditors given in Table 1.

**Table 1** Auditors for Internal Academic Audit

| Departments/ Groups | UG Auditor | PG Auditor |
|---|---|---|
| FY coordinator | Mr. B.R. Kavathekar | Mr. B.R. Kavathekar |
| Civil | Mrs. S.P. Diwan | Mr. V.V. Dhende |
| APM | Mrs. V.B. Girgaonkar | Mr. V.V. Dhende |
| Mechanical | Mr. S.R. Khedkar | Mrs. M.R. Khare |
| Electrical | Dr. S.S. Solapure/ Dr. S.V. Gaikwad | Dr. S.S. Solapure |
| Electronics | Mrs. S.A. Aitwade | Mrs. S.S. Rokade |
| CSE | Dr. A.J. Umbarkar | Mr. M. S. Mahagaonkar |
| IT | Dr. P.K. Sohoni | -- |

Although the scheduled time circulated was 10 30 am onwards, 21st July 2023, due to requests from various heads, the audit was allowed to be conducted within weeks' time. The venue for the audit was at the respective department wherein the respective DAC worked as hosts. The course books for the courses offered by the particular department / section were to be collected by respective DACs.

The scanned copy of internal academic audit reports has been sent to respective Heads of Dept. for reference and necessary follow up. As the number of unavailable coursebooks for the scheduled audit was significant, it was decided to conduct the additional round of Academic Audit scheduled in the 3rd Week of August 2023. The third round of academic audit was carried out for remaining defaulting course coordinators till 4$^{th}$ Sept. 23.

## 2. Rubric Used to assess the coursebooks

Following rubric formats were used to assess the course files: -

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WALCHAND COLLEGE OF ENGINEERING SANGLI.

An Autonomous Institute

<u>End Semester Internal Academic Audit :</u>

**Theory Courses**

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| 1. Academic Year and Semester: | SEM I / II | | 2. Department: | | 3. Class: | |
|---|---|---|---|---|---|---|
| **Course code** <br><br> **Course Name** | | | | | | |
| **Course Teacher Name** | | | | | | |
| Course delivery (Lesson Plan and Execution) | | | | | | |
| ISE : planned and executed | | | | | | |
| Counselling to students | | | | | | |
| Question papers | | | | | | |
| Results | | | | | | |
| CO attainments | | | | | | |
| Remarks if any | | | | | | |
| **Name and Signature of Auditor** | | | | | | |
| *Ratings:* **0**: Data Not Provided, **1:** Poor, **2:** Average, **3**: G: Good, **4:** VG: Very Good, **5:** Excellent | | | | | | |

WALCHAND COLLEGE OF ENGINEERING SANGLI.

An Autonomous Institute

<u>End Semester Internal Academic Audit</u>

**<u>Lab Courses</u>**

| 1. Academic Year and Semester:  SEM  I  / II | 2. Department: | | 3. Class: | | |
|---|---|---|---|---|---|
| **Course code** | | | | | |
| **Course Name** | | | | | |
| **Course coordinator Name** | | | | | |
| **Course delivery (Lesson Plan and Execution)** | | | | | |
| **ISE :  planned and executed** | | | | | |
| **Counselling to students** | | | | | |
| **Rubrics developed if any** | | | | | |
| **Results** | | | | | |
| **CO attainments** | | | | | |
| **Remarks if any** | | | | | |
| **Name and Signature of Auditor** | | | | | |
| **Ratings:  0**:  Data Not Provided, **1:** Poor, **2:** Average, **3**: G: Good, **4**: VG: Very Good, **5**: Excellent | | | | | |

# 3. Results and Analysis

## 3.2 Civil Engineering Department:

A department-wise summary based on the observations noted from the reports submitted by the auditors is given below.

| Programme | Academic Year | Semester | No. of Courses | Unavailable coursebooks | Average ratings |
|---|---|---|---|---|---|
| B.Tech. Civil Engg. And FY | 2022-23 | Sem I | 27 | 3 | 3.1 |
| | | Sem II | 21 | 3 | 3.3 |
| | 2021-22 | Sem I | 20 | 2 | 2.5 |
| | | Sem II | 20 | 5 | 2.1 |
| M.Tech Environmental | 2022-23 | Sem I and II | 25 | 13 | 1.78 |
| | 2021-22 | Sem I and II | 22 | 3 | 2.75 |

*Note: Average percentage of Unavailable coursebooks is 21.48 % .*

## 3.2 Mechanical Engineering Department:

| Programme | Academic Year | Semester | No. of Courses | Unavailable coursebooks | Average ratings |
|---|---|---|---|---|---|
| B.Tech. Mechanical Engg. And FY | 2022-23 | Sem I | 43 | 6 | 2.4 |
| | | Sem II | 41 | 6 | 2.7 |
| | 2021-22 | Sem I | 29 | 8 | 2.5 |
| | | Sem II | 37 | 11.0 | 2.3 |
| | 2020-21 | Sem I | 30 | 9 | 2.0 |
| | | Sem II | 24 | 10 | 1.5 |
| M.Tech. Design | 2022-23 | Sem I and II | 14 | 0 | 2.7 |
| | 2021-22 | Sem I and II | 22 | 6 | 1.9 |
| M.Tech. Heat Power | 2022-23 | Sem I and II | 19 | 10 | 1.0 |
| M.Tech. Production | 2022-23 | Sem I and II | 18 | 5 | 1.8 |

*Note: Average percentage of Unavailable coursebooks is 26 %*

## 3.3 Electrical Engineering Department:

| Programme | Academic Year | Sem | No. of Courses | Unavailable coursebooks | Average ratings |
|---|---|---|---|---|---|
| B.Tech. Electrical Engg. And FY | 2022-23 | Sem I | 36 | 5 | 3.1 |
| | 2022-23 | Sem II | 38 | 6 | 3.1 |
| | 2021-22 | Sem II | 23 | 9.0 | 2.0 |
| M.Tech -Control Systems | 2022-23 | Sem I and II | 21 | 2.0 | 3.1 |
| M.Tech -Power Systems | 2022-23 | Sem I and II | 32 | 7 | 2.7 |

*Note:   Average percentage of Unavailable coursebooks is 19 %*

## 3.4 Electronics Engineering Department:

| Programme | Aca. Year | Semester | No. of Courses | Unavailable coursebooks | Average ratings |
|---|---|---|---|---|---|
| B.Tech. Electronics Engg. And FY | 2022-23 | Sem I | 40 | 22 | 1.4 |
| | 2022-23 | Sem II | 35 | 17 | 1.7 |
| | 2021-22 | Sem II | 34 | 27.0 | 0.6 |
| M.Tech Electronics | 2022-23 | Sem I and II | 22 | 11.0 | 1.6 |
| | 2021-22 | Sem | 9 | 4 | 1.8 |

*Note:   Average percentage of Unavailable coursebooks is **59 %** ,* CO attainment is a concern.

## 3.5 Computer Science and Engineering Department:

| Programme | Academic Year | Semester | No. of Courses | Unavailable coursebooks | Average ratings |
|---|---|---|---|---|---|
| B.Tech. CSE And FY | 2022 -23 | I | 36 | 1 | 2.8 |
| | 2022 -23 | II | 23 | 2 | 3.4 |
| | 2021-22 | II | 25 | 4 | 2.8 |
| M.Tech CSE | 2022 -23 | I | 11 | 3 | 2.8 |
| M.Tech CSE | 2022 -23 | II | 11 | 4 | 2.2 |

*Note:   Average percentage of Unavailable coursebooks is 13 % , CO attainment is a concern*

## 3.6 Information Technology Department:

| Programme | Academic Year | Semester | No. of Courses | Unavailable coursebooks | Average ratings |
|---|---|---|---|---|---|
| B.Tech. IT | 2022 -23 | I | 29 | 13 | 1.9 |
| B.Tech. IT | 2022 -23 | II | 26 | 14 | 2.0 |
| B.Tech. IT | 2021-22 | II | 32 | 21 | 1.1 |

*Note: No MTech admissions in recent years.   Average percentage of Unavailable coursebooks is 55%*

## 3.7 Applied Mechanics Department:

| Programme | Academic Year | Semester | No. of Courses | Unavailable coursebooks | Average ratings (out of 5) |
|---|---|---|---|---|---|
| B.Tech. Civil Engg. | 2022 -23 | I | 16 | 0 | 3.8 |
| B.Tech. Civil Engg. | 2022 -23 | II | 8 | 0 | 3.8 |
| B.Tech. Civil Engg. | 2021-22 | II | 12 | 0 | 3.9 |
| FY | 2022 -23 | I and II | 8 | 0 | 4.2 |
| FY | 2021-22 | I and II | 8 | 0 | 3.4 |
| FY | 2020-21 | I and II | 8 | 0 | 2.9 |
| M. Tech Structural Engg. | 2022 -23 | II | 4 | 0 | 3.6 |
| M. Tech Structural Engg. | 2022 -23 | I | 7 | 0 | 3.2 |
| M. Tech Structural Engg. | 2021-22 | II | 6 | 0 | 3.1 |

## 3.8 Humanities Section:

| Programme | Academic Year | Semester | No. of Courses | Unavailable coursebooks | Average ratings |
|---|---|---|---|---|---|
| All B.Tech. | 2022-23 | Sem I | 42 | 16 | 2.6 |
| All B.Tech. | 2022-23 | Sem II | 32 | 19 | 2.1 |
| All B.Tech. | 2021-22 | Sem I | 42 | 27.0 | 1.6 |
| All B.Tech. | 2021-22 | Sem II | 33 | 8 | 2.7 |

*Note:  Average percentage of Unavailable coursebooks is **47 %** , CO attainment is a concern*

Summary of Results:

- Total number of courses expected to be audited : 895
- Percentage of coursebook records made available: 69%
- Average audit rating: 47%
- Average Lowest rubric Element rating : 17% (Counselling to students)
- Average Highest rubric Element rating : 59% (Course delivery , Results)
- Average CO attainment rating:  54%

# 4. Conclusions

1. The coursebook record keeping along with CO attainments seems to have suffered due to four years break in coursebook audit practice. It is clearly indicated in terms of low performance ratings to CO attainment rubric element and number of unavailable coursebooks.
2. It is observed that laboratory and Mini-project coursebooks are not maintained in comparison with the theory coursebooks. However such courses are related to application and demonstration of knowledge and hence significantly contribute to the CO-PO  mapping. In case of courses executed in small student batches, their seems to be problem of non-coordination between different teachers and relevant course coordinator.
3. Formative assessments needs to be encouraged as part of In semester evaluations in comparison with conventional tests.  Availability of Question papers or assessment rubric is a concern as its rating is just 40%
4. The visits of NBA, NAAC committee is expected in the current semester. Hence corrective actions in form of course records and calculation of CO attainments is most urgent.  CO attainment records are poor. All the Heads of Dept. are requested  to take follow-up action through DAC's and ensure that the above observations,  wherever applicable are addressed so that all courses are properly documented. The action taken report should be submitted by the HOD's to the Director at the earliest.

*This Report is further submitted to IQAC Chairman.*

Dr. A. K. Kokane,
Associate Dean,
Quality Assurance