

Dr. Babasheb Ambedkar Technological University
Academic Audit of Department of Chemical Engineering
Action Taken Report by Head of the Department 2020-21

I-COLLEGE PROFILE

1	Name of the College, Website, email and Ph.No.	Department of Chemical Engineering, Dr. BATU- Lonere Campus		
2	Name of the HoD, email & Mob.No	Dr. A. R. Chavan, archavan@dbatu.ac.in, 9987891080		
3	Name of the Vice-Principal, email & Mob. No.	Not applicable		
4	Name of the IQAC Coordinator, email & Mob. No.	Dr. S. L. Nalbalwar, shalbalwar@dbatu.ac.in, 8793814621		
5	Year of Establishment & own land if any	1989, Yes		
6	NBA accreditation	Not at present	Twice in past i.e in year 2003 and 2007	
7	NAAC Grade with Cycle, Accredited Year & CGPA (if not Accredited Status of Preparations)	B grade, First cycle 2015.2.35 NAAC executive committee no and date - EC(SC)_05_A&A_083 dated 3-3-2015 Dr Babasheb Ambedkar Technological University Lonere Raigad, valid for 5 years		
8	UGC Recognition (2F & 12 B)	Yes		
9	College Working Hours (if shift system mention details of both shifts & give reasons for shift system)	9 am - 6 pm		
10	No. of Posts Sanctioned:14 Course wise & Year wise Students strength particulars (Proforma enclosed & to be submitted along with AAR)	Regular Working: 06	Contract Working: 05	Nil

General Comment: The activities are based on 2018-19 events. Due to COVID, most of the events in 2019-20 and 2020-21 could not be conducted.

II-CURRICULAR ASPECTS

Item	Recommendation / Suggestions by Academic Advisors	Action Taken by the HoD
	A(Good)/B(Satisfactory)/C (poor) after observation	
	Grade Recommendation	



Academic Audit Summary Sheet: Chemical Engineering Department

Institution: Dr. Babasaheb Ambedkar Technological University Lonere -Raigad
Program Title(s): B. Tech. in Chemical Engineering
Academic Audit Status: Present one 2019-20
First Academic Audit 14-15 & 15-16: Completed
Second Academic Audit 16-17: Completed
Third Academic Audit 17 - 18: Completed
Fourth Academic Audit 18-19 completed.

Each undergraduate program undergoes either an academic audit or external peer review.

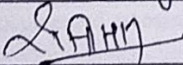
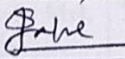
The criteria used to evaluate a program appear in the following "Academic Audit Summary Sheet" have been selected based on the Academic Audit Focal Areas to be consistent with the spirit and process of the Academic Audit.

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When combined with the self-study and the written report prepared by the visiting team, the Summary Sheet will facilitate institutional development of a program action plan to ensure continuous quality improvement.

AUDIT TEAM

Sr. No.	1	2
Name	Dr. R.S. Sirsani	M.V. N.B. Sane
Title	Associate Professor	Sr. Manager (Chem)
Institution	UICT KBC NMU Jalgaon	Rashmiya chemicals & fertilizers Ltd, Thal, Aahang
Signature		
Date	29.10.2021	29.10.2021

Academic Audit Summary Sheet

Institution/University Department: Chemical Engineering
 Program Title: B. Tech in Chemical Engineering
 Degree Level: Undergraduate Program
 Academic Audit Status: Current 2019 - 20
 First Academic Audit 14-15 & 15-16: Completed
 Second Academic Audit 16-17: Completed
 Third Academic Audit 17 - 18: Completed
 Fourth Academic Audit 18 - 19: Completed

Evaluation Results

No	Criterion	Met/ not met	% achieved
1	LEARNING OBJECTIVES AND RESOURCES		
1.1	The Faculty member has prepared Course Files as per the learning objectives of the program	Met	96%
1.2	The Faculty member has shared his course file with the students of the class through Intranet/ Social media or any other means	Partially Met	86%
1.3	The faculty member documented specific benchmarks of his course to account for learning objectives	Partially Met	65%
2.	CURRICULUM AND CO-CURRICULUM		
2.1	The faculty member collaborated with other faculty members for effective design, sequence of courses and delivery of course for improvements and documented these efforts appropriately	Partially Met, collaborated with other depts..	75%
2.2	The faculty member documented a plan for analyzing the course content in terms of achieving program objectives.	Met, Seen PEOs	95%
2.3	The faculty member documented a plan for review of curriculum and co-curriculum comparing those with the best practices elsewhere or in best institutes	Met, compared with AICTE Model Curriculum	80%
3	TEACHING AND LEARNING PROCESSES		
3.1	The faculty member analyzed his/her own methods for improving teaching and learning throughout the program and practiced them.	Partially Met	75%
3.2	The faculty member developed and promoted effective instructional methods, other than lecturing, so that student achieves the learning objectives.	Partially Met	85%
3.3	The faculty member developed materials for achieving student mastery of learning objectives.	Met record of Test, mid- sem, quizzes, assignment etc.	95%
4.0	STUDENT LEARNING ASSESSMENT		
4.1	The Faculty member has announced the method of continuous assessment at the beginning of the course and followed it throughout.	Met	100%
4.2	The faculty member developed techniques, other than written test, for the student learning assessments to improve the program.	Partially Met Quiz with HOD Sign	75%
4.3	The faculty member has documented assessment of student learning	Partially Met, Result Analysis	75%
4.4	The faculty member has developed measurable indicators of student learning success	Met	95%



4.5	The faculty member has developed and documented a continuous improvement plan that incorporates multiple measures to assess student learning and program effectiveness.	Not Met	30%
4.6	The Student has put in his/her own efforts in the learning process from resources outside the Institute.	Met, NPTEL, Wikipedia, etc.	98%
4.7	The students are challenged enough to use their knowledge creatively	Partially met, through mini-projects	60%
5.0	QUALITY ASSURANCE		
5.1	There is an existing process in the Institute to understand the parameters of quality of teaching and learning processes	Met	98%
5.2	There is an initiative to understand the parameters of quality of teaching and learning processes, if not existing.	NA	NA
5.3	There is commitment to making continuous quality improvements in the program a top priority	Partially Met	75%
5.4	The performance of students in Internal Assessment and University Examinations is comparable.	Met	98%
5.5	There is sufficient feedback obtained from stakeholders in development of academic processes in the College.	Met	75%
5.6	There is sufficient evidence of attempts to understand the industries/ Society's need in delivery of appropriate course content to the students	Met	95%
6	OVERALL ASSESSMENT		
6.1	The Academic Audit process was Faculty driven.	Met	95%
6.2	The Academic Audit process (self-study and visit) included descriptions of the program's quality processes including all five focal areas.	Partially Met	70%
6.3	The Audit resulted in a candid description of weaknesses in program processes and suggestions for improvements.	Partially Met	60%
6.4	There is openness and thoroughness of the faculty members in completing the academic audit of this program.	Met	90%
6.5	The Academic Audit process included involvement of and inputs from stakeholder groups identified by the program's faculty members	Partially Met, LR & CR Sign.	70%, it was scheduled but due to Covid, could not be completed
7	FOLLOW-UP OF PREVIOUS AUDIT		
7.1	An action plan was developed as a result of the previous Academic Audit.	Partially Met	75%
7.2	There is documented evidence that recommendations made by the previous Academic Audit Team have been considered and, when feasible and appropriate, implemented and tracked.	Partially Met	75%
7.3	There is documented evidence that the program has been implemented and tracked the progress of and use of results from improvement initiatives cited by the faculty its self-study.	Partially Met	65%
8	SUPPORT		
8.1	The program regularly evaluates its library, equipment and facilities, encouraging necessary improvements within the context of overall college resources.	Met	95%
8.2	The program's operating budget is consistent with the needs of the program.	Partially Met	80%
8.3	The program has a history of enrolment rates sufficient to sustain high quality and cost-effectiveness.	N. A.	N. A.

8.4	The program has a history of graduation rate sufficient to sustain the quality of the program.	Partially Met	80%
8.5	The program has a history of placement rate sufficient to sustain high quality of program outcome.	Partially Met	60%
8.6	The Program has a history of generating support from industries and alumni to sustain itself.	Met less.	50%

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29.10.21

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29, 10. 2021

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Dr. Babasaheb Ambedkar Technological University

Academic Audit of Engineering Colleges

Format for submission of Academic Audit Report (AAR) 2019-20

Name of Department: Chemical Engineering

Sr. No.	Item	Grade	Impression
1	Conduct of Classes	A	From attendance record it is clear that classes have been conducted regularly as per time-table.
2	Co-Curricular Activities & Extra-Curricular Activities	A	Department conducted GATE Coaching classes and guest lectures from industry experts academia for faculty and students of the department. The departmental sports event was organized. Orientation program and Science day celebration was done and also engineers day was also celebrated on the departmental level.
3	Department Activity Register	B	Department has maintained the records of all important activities conducted from time to time in the form of reports, minutes, photographs, feedbacks, attendance etc. Overall record keeping is good but needs improvement.
4	Discipline in the campus	A	Department has maintained good discipline. The rules and regulations framed by the department are followed strictly.
5	IQAC	A	University has its own IQAC Cell which looks after and maintains overall quality in all.
6	Placement	B	Though department has improved over the last performance and has been able to place about 50% of its students to be placed on-campus or off-campus. However, there is still scope to improve the current scenario. Department is encouraging students to opt for innovation and Incubation from the initial years itself. To create awareness, the department organized talks and workshops from successful entrepreneurs
7	Departmental research	A	It is observed that department faculty regularly publish their research work in reputed journals and conferences, however this needs boost. Research facility in the department is upgraded

			<p>regularly as per requirement, again there is need to improve upon it.</p> <p>Many of the UG and PG projects given to the students are good and some are product based.</p> <p>Presently 09 students are pursuing Ph. D in the department.</p>
8	Career Guidance Cell	B	This cell is in place at department level. Regularly expert talks are arranged for students to create awareness about various opportunities.
9	SWAYAM facilities	A	Presently students have enrolled for the courses through SWAYAM platform as per their willingness.
10	Library	A	In addition to University Library, department has its own library in place, which needs improvement. The books in the library have been collected from Alumni, Teachers and outgoing students, complementary books from the publishers. Along with books, the past years UG/PG/PhD project reports are also available to students for reference. The record of the same is maintained by the department
11	Research & Laboratories	A	Major research areas of the department are Reactive distillation, Reactive Chromatography, Process Control & optimization, Heat Transfer and Bioprocess Engineering. The state of the art equipments and software are available in the department.
12	Games & Sports	A	It is found that students of the Department are actively participating and excelling in extra-curricular activities like sports. The students have fetched prizes and laurels at University and State level.
13	Humanities and Foundation Courses	A	These courses have been incorporated in the curriculum as per mandate of UGC/AICTE.
14	Teacher Evaluation by Students	A	The feedback system is in place. After collecting feedback from students (currently offline), the same is analyzed and report is prepared.
15	Maintenance of Registers	B	For keeping track of various activities, different Registers have been maintained but needs improvement.
16	Teaching Diaries & Plans	A	In course file along with teaching plan, notes, course material, question bank, assignments, question papers have been well maintained.

17	NCC / NSS	A	This activity is carried out at University level and students of the department actively participate in the events arranged by cell at various level.
18	Women Empowerment Cell	A	This cell is at University level.
19	Professional Clubs	A	ChEA, SOLAR Energy Cell, Defense Services Equipment's Automation Club and UCEL (United cell for Entrepreneurship and Leadership).
20	Sanitation & drinking water	B	Available and maintained by the University, this needs improvement.
21	Cleanliness	B	Departmental cleanliness is OK but overall University campus cleanliness can be improved.
22	Functioning of Teachers	A	Most of teachers have kept their record as per the requirement of NBA/NAAC
23	Over All Impression on the Department	A	Good. In addition to efficiently handling of department work, the faculty and staff members of the department are successfully handling various responsibilities at University level. Especially Research activities and industrial interaction is appreciated.
24	Any other observation: University have a common incubation center to carryout research. Also social innovation can be carried out for generating /increasing local job prospectus. University library should have facility of e-Journals. The concern found is about faculty student ratio as well as space scarcity which need to be addressed. The physical infrastructure is also found limited and less as per requirement.		

✓ A(Good)/ B(Satisfactory)/ C (Poor)

Signatures of Academic Auditors

[Signature]
29.10.21

[Signature]
29.10.2021

**Academic Audit of Department of Chemical Engineering
Action Taken Report by Head of the Department 2019-20**

I-COLLEGE PROFILE

1	Name of the College, Website, email and Ph.No.	Department of Chemical Engineering, Dr..BATU- Lonere Campus	
2	Name of the HoD, email & Mob.No	Dr. Yogesh S. Mahajan, ysmahajan@dbatu.ac.in, 9421939941	
3	Name of the Vice-Principal, email & Mob. No.	Not applicable	
4	Name of the IQAC Coordinator, email & Mob. No.	Dr. L. N. Singh, Mobile No. 8087369025, lnsingh@dbatu.ac.in	
5	Year of Establishment & own land if any	1989, Yes	
6	NBA accreditation	Not at present	Twice in past i.e in year 2003 and 2007
7	NAAC Grade with Cycle, Accredited Year & CGPA (if not Accredited Status of Preparations)	B grade, First cycle 2015.2.35 NAAC executive committee no and date - EC(SQ)_05_AkA_083 dated 3-3-2015 Dr Babasaheb Ambedkar Technological University Lonere Raigad, valid for 5 years	
8	UGC Recognition (2F & 12 B)	Yes	
9	College Working Hours (if shift system mention details of both shifts & give reasons for shift system)	9 am - 6 pm	
10	No. of Posts Sanctioned:14	Regular Working: 06	Contract Working: 05 Nil
11	Course wise & Year wise Students strength particulars (Proforma enclosed & to be submitted along with AAR)	Copy attached.	
II-CURRICULAR ASPECTS			
	Item	Recommendation / Suggestions by Academic Advisors A(Good)/B(Satisfactory)/C (poor) after observation	
		Grade	Recommendation
1	Implementation of Annual Institutional Plan	A	Plan was there, record was not there Action Taken by the HoD The record was maintained and will be maintained for next years.

3	College Activity Register 2018-19	A	Available	Maintained	for next years.
4	Departmental Activity Registers (Dept. Wise)	A	Prepared and records are available with concerned authorities	For 19-20 it was maintained and will be maintained for next years	
5	Add-on Courses (Department-wise) completed during 2019-20	B	Record of certificates need to be maintained	Not yet done, but will be updated although courses are undertaken.	
6	Add-on Courses (Department-wise) in 2019-20	B	Record of certificates need to be maintained.	Not yet done, but will be updated although courses are undertaken.	
7	Coverage of Syllabus (Average Percentage)	A	Actual implementation to be linked with annual plan	Done for the year 19-20	
8	Teaching of Humanities & Foundation Courses	A	Added in academics	Already added in the syllabus	
9	No. of New UG & PG Courses introduced this year:	NA	Need to improve	Proposal for M. Tech. in Environmental Engineering was submitted to Govt. For approval for restart.	
10	Maintenance of Student Attendance Registers	A	Record to be produced	Record is available.	
11	Feedback forms on Curriculum from students	A	Record to be produced	Record is available.	
III-TEACHING, LEARNING & EVALUATION					
1	Teaching Diaries & Plans in the Prescribed Formats	A	Record needs enhancement	will be enhanced in further years	
2	Co-Curricular Activities (College Level)	A	Needs enhancement	Improved over last year and conducted a number of activities.	
3	Academic Competitions (College & Above level)	B	Records available, need improvement	Updated for 19-20, but needs further improvement.	
4	Conduct of Internal Examinations	A	Rubrics need to be implemented for continuous assessment	Existing processes will be redefined as per guidelines.	

6	Teacher wise result analysis	A	Record to be produced	Record made available.
7	Remedial Classes	B	Requires attention	Point noted but due to lack of funding this could not be implemented.
8	Record of Evaluation of Teachers by Students	A	Record to be produced	Record made available.
IV-RESEARCH AND CONSULTANCY				
1	Is the College a Recognized Research Centre	A	Yes	NA
2	No. of Research Guides in the College (dept)	B	4	When new faculty will join, this number will improve.
3	No. of Research Scholars working for Masters & Ph.D	A	3 + 9 = 12	Needs to increase this number
4	Major/Minor/Other Research Projects	B	TEQP-III two projects sanctioned.	Needs improvement
5	Research Papers Published in previous academic year (International /National)	A	Records available in department	Record is available.
6	Papers Presented in previous academic year (International /National/ State)	A	Records available in department	Record is available.
7	Books Published in previous academic year(Single Author/ Co Author)	B	Needs improvement	Will be improved
8	Seminars/Workshops/ Training Programme Conducted in previous academic year (International /National/ State)	A	1. AICTE Two weeks course	OK
9	Record of Consultancy in previous academic year	B	Record to be produced	Record available for 2019-20.
10	Record of MOUs in previous academic year	A	No MoU record available.	MoU done with one industry in 190
V-EXTENSION ACTIVITIES				
1	Record of Subject/Department Related Extension Activities	A	Certificate course for Privi Organics, Mahad Personnel	Improved over previous year
2	Name of the NSS PO & Mobile No.	NA		

4	NSS activity register	NA	Record available with the University	Record is available at the University level
5	Name of the NCC ANO & Mobile No.	NA		
6	NCC Attendance register	NA		
7	NCC activity register	NA		
8	Name of the Professional Club Coordinator & Mobile No.	B	Prof. Y. N. Patil, Nature and other activities club	Improved over previous year
9	Professional Club Activities	C	Prof. Y. N. Patil, Nature and other activities club	Improved over previous year
10	Name of the Women Empowerment Cell(WEC) Coordinator & Mobile No.	NA	Prof. Mrs. Suvarna Dhongade	Record updated.
11	WEC Activities	NA	Prof. Mrs. Suvarna Dhongade	Record updated.
12	Name of the Eco-Club Coordinator & Mobile No.	NA	Prof. R. P. Kate, Coordinator Environmental Club	Record is available at the University level
13	Eco- Club Activities	NA	Prof. R. P. Kate, Coordinator Environmental Club	Record is available at the University level
14	Name of the Consumer Club Coordinator & Mobile No.	NA	Mr. S. G. Lad	Record is available at the University level
15	Consumer Club Activities	NA	Record is available at the University level.	Record is available at the University level
16	Any other Club	C	Requires more efforts	Point noted for 2019-20
VI-LEARNING RESOURCE				
1	Name of the Librarian & Mob.No	NA	Available	Available
2	Access timings of the Library	NA	1000 am to 530 pm	1000 am to 530 pm
3	Circulation of Books among Students	NA	Situation Improved as per feedback from students	Steps have been taken to improve the situation.

		exam section	steps have been taken to improve the situation.
5	Record of Visitors	NA	Record is available in the Library.
6	Status of Library Automation	NA	Work in this direction is in progress.
7	e- Resources & e-Journals	C	Efforts will be taken to improve the scenario
8	Name of SWAYAM Coordinator & Mob.No	NA	Record updated.
9	Usage of Internet by students in the Library	B	This point will be communicated to respective authority
10	Status of SWAYAM facilities functioning	NA	Record is available with the SWAYAM coordinator.
11	Whether SWAYAM schedule is circulated to the students	NA	Record is available with the SWAYAM coordinator.
12	Maintenance of SWAYAM Viewers' Register	NA	Record is available with the SWAYAM coordinator.
VII-Student Support Activities			
1	Name of Physical Director & Mob.No	NA	Record is available with the Sports coordinator.
2	Record of Physical Education Department	NA	Record is available with the Sports coordinator.
3	Records of events conducted and significant achievements in Sports & Games	C	Record was updated for 18-19 and for 1920
4	Record of cultural programmes conducted	C	Record was updated for 18-19 and for 1920
5	Record of any other extra-curricular activities conducted	C	Record was updated for 18-19 and for 1920
6	Maintenance of placement facilities & records	NA	Dr. A. R. Chavan has been nominated as de ptd. Coordinator. Record is available.

8	Record of Student trained and placed	B	Record available. Placement need to be improved	Special Efforts will be taken
9	Name of Career Guidance Coordinator and Mob.No	NA	Records maintained	Dr. A. R. Chavan has been nominated as de.ptl. Coordinator. Record is available.
10	Record of activities Career Guidance and placement cell	NA	Records maintained	Dr. A. R. Chavan has been nominated as de.ptl. Coordinator. Record is available.
11	Name of Dept Review Committee Coordinator & Mob. No.	C	Department has to form DRC	Not done for 18 - 19, will be done for 19 - 20
12	Implementation of DRC Action Plan	C	NA	NA
13	IQAC activities & maintenance of records , (Action Plan/Minutes of Meeting/ submission of AQAR to NAAC etc)	NA	Records maintained	Record is available with the Dept as well as with IQAC director.
14	Record of Support by Alumni Association	B	Alumni association needs to be registered	Point noted and will be attended
15	Record of Grievance Redressal Cell / Anti Ragging Cell	NA	Records maintained at the University level	Records maintained at the University level
16	Mentoring / Counselling System	NA	Records maintained at the University level	Records maintained at the University level

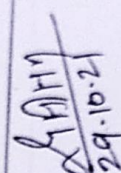
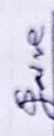

1	Maintenance of drinking water	A	Good Facility	No action required
2	Maintenance of Sanitation	C	Very unhygienic and urgent maintenance required	Was reported to estate section.
3	Rest room for women students	A	Available	Available.
4	Greenery & Cleanliness	A	Lush green campus	Lush green campus
5	Health Care Facility	B	Round the clock dedicated person needed	Was conveyed to university authority
6	Canteen	B	canteen requires improvement	Was communicated to canteen committee

IX-GOVERNANCE AND LEADERSHIP

1	Management Committee Register	NA	Records available with the University authorities.	Records available with the University authorities.
2	Functioning of Committees in Administration (Minutes of Meetings)	NA	Records available with the University authorities.	Records available with the University authorities.
3	Awards/Achievements	C	Requires efforts	Point noted
4	Faculty development initiatives if any	B	Many faculty were motivated to undergo training and also opt for Higher studies	Point noted.

X- IT INITIATIVES

1	e-class rooms (Number & Usage)	B	Number to be added	Was communicated to higher authority
2	Internet Centre	B	Center is available. Sufficient Bandwidth not available. Poor connectivity	Communicated to higher authority
3	Computer labs (No. of labs & working systems)	B	No of computers needs to be increased and genuine softwares should be purchased.	The no. of working computers is increased to 25. Aspen Plus will be purchased soon. MATLAB is available.

	Record of best/innovative practices by the institution	B	Requires improvement. Records need to be maintained	Point noted
2	College Activity Register & Hard Copy of AQAR previous academic year (should be available with the Principal)	B	Details of minutes and meeting recorded	Available at the University Level.
3	Over All Impression on the College	B*	 29.10.21	 29.10.2021
	 Signature of the Head of Department			

AA

Academic Audit Summary Sheet: Chemical Engineering Department

Institution: Dr. Babasaheb Ambedkar Technological University Lonere -Raigad

Program Title(s): B. Tech. in Chemical Engineering

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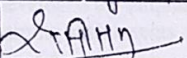
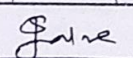
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AUDIT TEAM

Sr. No.	1	2
Name	Dr. R.S. Siroam	N. B. Salve
Title	Associate Professor	Sr. Manager (Chem)
Institution	UIC, KBC NMU Jalgaon	Rashmiya chemicals & Fertilizers Ltd. Thal
Signature		
Date	29.10.2021	29.10.2021



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4.2	The faculty member developed techniques, other than written test, for the student learning assessments to improve the program.	Partially Met Quiz	70%

4.3	The faculty member has documented assessment of student learning	Partially Met, Result Analysis N.A.	NA
4.4	The faculty member has developed measurable indicators of student learning success	Met	95%
4.5	The faculty member has developed and documented a continuous improvement plan that incorporates multiple measures to assess student learning and program effectiveness.	Not Met	30%
4.6	The Student has put in his/her own efforts in the learning process from resources outside the Institute.	Met, NPTEL, Wikipedia, etc.	98%
4.7	The students are challenged enough to use their knowledge creatively	Partially met, through mini-projects	80%
5.0	QUALITY ASSURANCE		
5.1	There is an existing process in the Institute to understand the parameters of quality of teaching and learning processes	Met	98%
5.2	There is an initiative to understand the parameters of quality of teaching and learning processes, if not existing.	NA	NA
5.3	There is commitment to making continuous quality improvements in the program a top priority	Partially Met	75%
5.4	The performance of students in Internal Assessment and University Examinations is comparable.	Met	98%
5.5	There is sufficient feedback obtained from stakeholders in development of academic processes in the College.	Met	75%
5.6	There is sufficient evidence of attempts to understand the industries/ Society's need in delivery of appropriate course content to the students	Met	95%
6	OVERALL ASSESSMENT		
6.1	The Academic Audit process was Faculty driven.	Met	95%
6.2	The Academic Audit process (self-study and visit) included descriptions of the program's quality processes including all five focal areas.	Partially Met	70%
6.3	The Audit resulted in a candid description of weaknesses in program processes and suggestions for improvements.	Partially Met	70%
6.4	There is openness and thoroughness of the faculty members in completing the academic audit of this program.	Met	90%
6.5	The Academic Audit process included involvement of and inputs from stakeholder groups identified by the program's faculty members	Partially Met,	70%, it was scheduled but due to Covid, could not be completed
7	FOLLOW-UP OF PREVIOUS AUDIT		
7.1	An action plan was developed as a result of the previous Academic Audit.	Partially Met	NA
7.2	There is documented evidence that recommendations made by the previous Academic Audit Team have been considered and, when feasible and appropriate, implemented and tracked.	Partially Met	NA
7.3	There is documented evidence that the program has been implemented and tracked the progress of and use of results from improvement initiatives cited by the faculty its self-study.	Partially Met	NA
8	SUPPORT		



8.1	The program regularly evaluates its library, equipment and facilities, encouraging necessary improvements within the context of overall college resources.	Met	95%
8.2	The program's operating budget is consistent with the needs of the program.	Partially Met	90%
8.3	The program has a history of enrolment rates sufficient to sustain high quality and cost-effectiveness.	NA	NA
8.4	The program has a history of graduation rate sufficient to sustain the quality of the program.	Partially Met	80%
8.5	The program has a history of placement rate sufficient to sustain high quality of program outcome.	Partially Met	60%
8.6	The Program has a history of generating support from industries and alumni to sustain itself.	Met less.	50%

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Dr. Babasaheb Ambedkar Technological University

Academic Audit of Engineering Colleges

Format for submission of Academic Audit Report (AAR) 2020 21

Name of Department: Chemical Engineering

Sr. No.	Item	Grade	Impression
1	Conduct of Classes	A	From attendance record it is clear that classes have been conducted regularly as per time-table, although online.
2	Co-Curricular Activities & Extra-Curricular Activities	NA	Due to COVID, many of the events could not be conducted.
3	Department Activity Register	NA	Department has maintained the records but Due to COVID, many of the events could not be conducted.
4	Discipline in the campus	A	Department has maintained good discipline, although UG students were not permitted to be present.
5	IQAC	A	University has its own IQAC Cell which looks after and maintains overall quality in all.
6	Placement	B	<p>Though department has improved over the last performance and has been able to place about 50% of its students to be placed on-campus or off-campus. However, there is still scope to improve the current scenario.</p> <p>Department is encouraging students to opt for innovation and Incubation from the initial years itself.</p> <p>To create awareness, the department organized talks and workshops from successful entrepreneurs.</p>

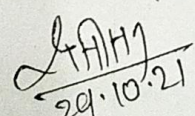


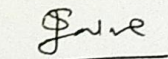
7	Departmental research	A	<p>It is observed that department faculty regularly publish their research work in reputed journals and conferences, however this needs boost. Due to COVID, this is hampered.</p> <p>Research facility in the department is upgraded regularly as per requirement, again there is need to improve upon it.</p> <p>Many of the UG and PG projects given to the students are good and some are product based.</p> <p>Presently 10 students are pursuing Ph. D in the department.</p>
8	Career Guidance Cell	NA	This cell is in place at department level. Due to COVID, many of its events could not be conducted.
9	SWAYAM facilities	A	Presently students have enrolled for the courses through SWAYAM platform as per their willingness.
10	Library	A	In addition to University Library, department has its own library in place. But due to COVID, most of the resources are unutilized. The books in the library have been collected from Alumni, Teachers and outgoing students, complementary books from the publishers. Along with books, the past years UG/PG/PhD project reports are also available to students for reference. The record of the same is maintained by the department.
11	Research & Laboratories	A	Major research areas of the department are Reactive distillation, Reactive Chromatography, Process Control & optimization, Heat Transfer and Bioprocess Engineering. The state of the art equipments and software are available in the department.
12	Games & Sports	A	It is found that students of the Department are actively participating and excelling in extra-curricular activities like sports. Due to COVID, no events could be conducted.
13	Humanities and Foundation Courses	A	These courses have been incorporated in the curriculum as per mandate of UGC/AICTE.
14	Teacher Evaluation by Students	A	The feedback system is in place. After collecting feedback from students (online), the same is analyzed and report is prepared.
15	Maintenance of Registers	B	For keeping track of various activities, different Registers have been maintained, but due to COVID, many of the events could not be conducted.

16	Teaching Diaries & Plans	A	In course file along with teaching plan, notes, course material, question bank, assignments, question papers have been well maintained.
17	NCC / NSS	A	This activity is carried out at University level but due to COVID, many of the events could not be conducted.
18	Women Empowerment Cell	A	This cell is at university level.
19	Professional Clubs	A	ChEA, SOLAR Energy Cell, Defense Services Equipment's Automation Club and UCEL (United cell for Entrepreneurship and Leadership).
20	Sanitation & drinking water	B	Available and maintained by the University, but due to COVID, many of the events could not be conducted.
21	Cleanliness	B	Departmental cleanliness is OK but overall University campus cleanliness needs to be improved.
22	Functioning of Teachers	A	Most teachers have kept their record as per the requirement of NBA/NAAC
23	Over All Impression on the Department	A	Good. Due to COVID, many of the events could not be conducted.
24	Any other observation: University started a common incubation center to carryout research. Also social innovation can be carried out for generating /increasing local job prospectus. University library should have facility of e-Journals. The concern found is about faculty student ratio as well as space scarcity which need to be addressed. The physical infrastructure is also found limited and less as per requirement.		

~~A~~(Good)/ B(Satisfactory)/ C (Poor)

Signatures of Academic Auditors and Head

1. Dr. R.S. Siosam

 29.10.21

2. N.B. Sare 
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1	Implementation of Annual Institutional Plan	A	Plan was there, record was not there	The record was maintained and will be maintained for next years.
2	Departmental Annual Curricular Plans	A	Was prepared	For 20-21 it was prepared and will be prepared for next years.
3	College Activity Register 2018-19	A	Available	Maintained
4	Departmental Activity Registers (Dept. Wise)	A	Prepared and records are available with concerned authorities	For 20-21 it was maintained and will be maintained for next years
5	Add-on Courses (Department-wise) completed during 2020-21	B	Record of certificates need to be maintained	Not yet done, but will be updated although courses are undertaken.
6	Add-on Courses (Department-wise) in 2020-21	B	Record of certificates need to be maintained.	Not yet done, but will be updated although courses are undertaken.
7	Coverage of Syllabus (Average Percentage)	A	Actual implementation to be linked with annual plan	Done for the year 20-21
8	Teaching of Humanities & Foundation Courses	A	Added in academics	Already added in the syllabus
9	No. of New UG & PG Courses introduced this year.	NA	Need to improve	Proposal for M. Tech. in Environmental Engineering was submitted to Govt. For approval for restart.
10	Maintenance of Student Attendance Registers	A	Record to be produced	Record is available.
11	Feedback forms on Curriculum from students	A	Record to be produced	Record is available.
III-TEACHING, LEARNING & EVALUATION				
1	Teaching Diaries & Plans in the Prescribed Formats	A	Record needs enhancement	will be enhanced in further years
2	Co-Curricular Activities (College Level)	B	Needs enhancement	could not be done due to Covid in proper manner but will be done in future
3	Academic Competitions (College & Above level)	B	Records available, need improvement	could not be done due to Covid in proper manner but will be done in future
4	Conduct of Internal Examinations	A	Rubrics need to be implemented for continuous assessment	Existing processes will be redefined as per guidelines.

5	Subject wise result analysis	B	Record to be produced	Record not made available by exam section
6	Teacher wise result analysis	B	Record to be produced	Record not made available by exam section
7	Remedial Classes	B	Requires attention	Point noted but due to lack of funding this could not be implemented.
8	Record of Evaluation of Teachers by Students	A	Record to be produced	Record made available.
IV-RESEARCH AND CONSULTANCY				
1	Is the College a Recognized Research Centre	A	Yes	NA
2	No. of Research Guides in the College (dept)	B	4	When new faculty will join, this number will improve.
3	No. of Research Scholars working for Masters & Ph. D	A	2 + 9 = 11	Needs to increase this number
4	Major/Minor/Other Research Projects	B	Nil	Needs improvement
5	Research Papers Published in previous academic year (International /National)	A	Records available in department	Record is available.
6	Papers Presented in previous academic year (International /National/ State)	A	Records available in department	Record is available.
7	Books Published in previous academic year(Single Author/ Co Author)	B	Needs improvement	Will be improved
8	Seminars/Workshops/ Training Programme Conducted in previous academic year (International /National/ State)	A	5 Day workshop conducted	OK
9	Record of Consultancy in previous academic year	B	Record to be produced	Record available for 2020-21
10	Record of MOUs in previous academic year	A	No MoU record available.	MoU done with one industry in 19-20
V-EXTENSION ACTIVITIES				
1	Record of Subject/Department Related Extension Activities	A	Certificate course for Privi Organics, Mahad Personnel	Improved over previous year
2	Name of the NSS PO & Mobile No.	NA		
3	NSS Attendance register	NA		

4	NSS activity register	NA	Record available with the University	Record is available at the University level.
5	Name of the NCC ANO & Mobile No.	NA		
6	NCC Attendance register	NA		
7	NCC activity register	NA		
8	Name of the Professional Club Coordinator & Mobile No.	B	Prof. Y. N. Patil, Nature and other activities club	Improved over previous year
9	Professional Club Activities	B	Prof. Y. N. Patil, Nature and other activities club	Improved over previous year
10	Name of the Women Empowerment Cell(WEC) Coordinator & Mobile No.	NA	Prof. Mrs. Suvarna Dhongade	Record updated.
11	WEC Activities	NA	Prof. Mrs. Suvarna Dhongade	Record updated.
12	Name of the Eco-Club Coordinator & Mobile No.	NA	Prof. R. P. Kate, Coordinator Environmental Club	Record is available at the University level.
13	Eco- Club Activities	NA	Prof. R. P. Kate, Coordinator Environmental Club	Record is available at the University level.
14	Name of the Consumer Club Coordinator & Mobile No.	NA	Mr. S. G. Lad	Record is available at the University level.
15	Consumer Club Activities	NA	Record is available at the University level.	Record is available at the University level.
16	Any other Club	C	Requires more efforts	Point noted for action in 2021-22

VI-LEARNING RESOURCE

1	Name of the Librarian & Mob.No	NA	Available	Available
2	Access timings of the Library	NA	1000 am to 530 pm	1000 am to 530 pm
3	Circulation of Books among Students	NA	Situation Improved as per feedback from students	Steps have been taken to improve the situation.
4	Availability of Previous years Question papers	A	available at department level and exam section	Steps have been taken to improve the situation.

5	Record of Visitors	NA	Records not available in department	Record is available in the Library.
6	Status of Library Automation	NA	Needs attention.	Work in this direction is in progress.
7	e- Resources & e-Journals	C	Have been generated but distribution system is yet not in place.	Efforts will be taken to improve the scenario
8	Name of SWAYAM Coordinator & Mob.No	NA	Records available at the University Level	Record updated.
9	Usage of Internet by students in the Library	B	Internet availability is a very big issue	This point will be communicated to respective authority
10	Status of SWAYAM facilities functioning	NA	Records not available in department	Record is available with the SWAYAM coordinator.
11	Whether SWAYAM schedule is circulated to the students	NA	Records available at the University Level	Record is available with the SWAYAM coordinator.
12	Maintenance of SWAYAM Viewers' Register	NA	Records available at the University Level	Record is available with the SWAYAM coordinator.
VII-Student Support Activities				
1	Name of Physical Director & Mob.No	NA	Records available at the University Level	Record is available with the Sports coordinator.
2	Record of Physical Education Department	NA	Records available at the University Level	Record is available with the Sports coordinator.
3	Records of events conducted and significant achievements in Sports & Games	C	Data for Department needs to be maintained	Record was updated for 18-19 and for 19-20
4	Record of cultural programmes conducted	C	Records could not be maintained due to CORONA	Record was updated for 18-19 and for 19-20
5	Record of any other extra-curricular activities conducted	C	Records could not be maintained due to CORONA	Record was updated for 18-19 and for 19-20
6	Maintenance of placement facilities & records	NA	Department person to be nominated for placement	Dr. A. R. Chavan has been nominated as depd. Coordinator. Record is available.
7	Record of Students trained in different verticals	NA	Records need to be maintained	Record was updated for 20-21
8	Record of Student trained and placed	B	Record available. Placement need to be improved	Special Efforts will be taken

9	Name of Career Guidance Coordinator and Mob.No	NA	Records maintained	Dr. A. R. Chavan has been nominated as dept. Coordinator. Record is available.
10	Record of activities Career Guidance and placement cell	NA	Records maintained	Dr. A. R. Chavan has been nominated as dept. Coordinator. Record is available.
11	Name of Dept Review Committee Coordinator & Mob. No.	C	Department has to form DRC	Not done for 18 - 19, was done for 19 - 20
12	Implementation of DRC Action Plan	C	NA	NA
13	IQAC activities & maintenance of records , (Action Plan/Minutes of Meeting/ submission of AQAR to NAAC etc)	NA	Records maintained	Record is available with the Dept as well as with IQAC director.
14	Record of Support by Alumni Association	B	Alumni association needs to be registered	Point noted and will be attended
15	Record of Grievance Redressal Cell / Anti Ragging Cell	NA	Records maintained at the University level	Records maintained at the University level
16	Mentoring / Counselling System	NA	Records maintained at the University level	Records maintained at the University level

VIII-Basic Amenities

1	Maintenance of drinking water	A	Good Facility	No action required
2	Maintenance of Sanitation	C	Very unhygienic and urgent maintenance required	Was reported to estate section.
3	Rest room for women students	A	Available	Available.
4	Greenery & Cleanliness	A	Lush green campus	Lush green campus
5	Health Care Facility	B	Round the clock dedicated person needed	Was conveyed to university authority
6	Canteen	B	canteen requires improvement	Was communicated to canteen committee


IX-GOVERNANCE AND LEADERSHIP

1	Management Committee Register	NA	Records available with the University authorities.	Records available with the University authorities.
2	Functioning of Committees in Administration (Minutes of Meetings)	NA	Records available with the University authorities.	Records available with the University authorities.
3	Awards/Achievements	C	Requires efforts	Point noted
4	Faculty development initiatives if any	B	Many faculty were motivated to undergo training and also opt for Higher studies	Point noted.

X - IT INITIATIVES

1	e-class rooms (Number & Usage)	B	Number to be added	Was communicated to higher authority
2	Internet Centre	B	Center is available. Sufficient Bandwidth not available. Poor connectivity	Communicated to higher authority
3	Computer labs (No. of labs & working systems)	B	No of computers needs to be increased and genuine softwares should be purchased.	The no. of working computers is increased to 25. Aspen Plus will be purchased soon. MATLAB is available.

XI-Best Practices

1	Record of best/innovative practices by the institution	B	Requires improvement. Records need to be maintained	Point noted
2	College Activity Register & Hard Copy of AQAR previous academic year (should be available with the Principal)	B	Details of minutes and meeting recorded	Available at the University Level.
3	Over All Impression on the College	B ⁺		
	 Signature of the Head of Department		1. Dr. R.S. Sinsem <u>29.10.21</u> 2. N. @ Sune <u>29.10.2021</u>	

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