

# INSTITUTIONAL ASSESSMENT AND ACCREDITATION (Effective from July 2017)

Accreditation - (Cycle - 2)

## PEER TEAM REPORT ON

## INSTITUTIONAL ACCREDITATION OF DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE U-0299

Lonere Raigad Maharashtra 402103

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL An Autonomous Institution of the University Grants Commission P.O. Box No. 1075, Nagarbhavi, Bengaluru - 560 072, INDIA

## Section I:GENERAL INFORMATION

1.Name & Address of the	DR. BABASAHEB AMBEDKAR	RTECHNOLOGICAL	
institution:	UNIVERSITY, LONERE		
	Lonere Raigad		
	Maharashtra		
	402103		
2. Year of Establishment	1989		
3.Current Academic Activities at the Institution(Numbers):			
Faculties/Schools:	4		
Departments/Centres:	12		
Programmes/Course offered:	15		
Permanent Faculty Members:	48		
Permanent Support Staff:	54		
Students:	2166		
4.Three major features in the institutional Context (Asperceived by the Peer Team):	<ol> <li>DBATU is a technological university affiliating institutions all across Maharashtra.</li> <li>The university has a large and sprawling campus situated in remote rural area thus bringing education to the doorstep of rural population.</li> <li>Community outreach is very good. Initiatives taken by the university have benefitted the nearby surrounding areas.</li> </ol>		
5.Dates of visit of the Peer Team	From : 04-10-2023	ne neuroy surrounding ureus.	
(A detailed visit schedule may be included as Annexure):	From : 04-10-2023 To : 06-10-2023		
6.Composition of Peer Team			
which undertook the on site visit:			
	Name	Designation & Organisation Name	
Chairperson	DR. KAVITA DARYANI RAO	FormerVice Chancellor,JAWAHARLAL NEHRU ARCHITECTURE FINE ARTS UNIVERSITY	
Member Co-ordinator:	DR. SEEMA VERMA	Dean,BANASTHALI VIDYAPITH	
Member:	DR. MANOJ KUMAR	Professor, Mechanical Engineering Department School of Engineering Technology IFTM University	
Member:	DR. PARAMMASIVAM K M	Professor, ANNA UNIVERSITY	
Member:	DR. JAYANT SONWALKAR	Professor,Institute of Managemen	
		Studies	

Section I:GENERAL INFORMATION			
		University Of Science And	
		Technology	
NAAC Co - ordinator:	Dr. M.s. Shyamasundar		

## Section II:CRITERION WISE ANALYSIS

Observations (Strengths and/or Weaknesses) on each qualitative metrices of the key Indicator under the respective criterion(This will be a qualitative analysis of descriptive nature aimed at critical analysis presenting strength and weakness of HEI under each criteria)

Criterion1	Criterion1 - Curricular Aspects (Key Indicator and Qualitative Metrices(QlM) in Criterion1)		
1.1	Curriculum Design and Development		
1.1.1	Curricula developed and implemented have relevance to the local, national, regional and		
QlM	global developmental needs which is reflected in Programme outcomes (POs), Programme		
	Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the		
	Institution.		
1.2	Academic Flexibility		
1.3	Curriculum Enrichment		
1.3.1	Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human		
QlM	Values ,Environment and Sustainability into the Curriculum		
1.4	Feedback System		

Qualitative analysis of Criterion 1

Dr Babasaheb Ambedkar Technological University follows a systematic process of designing and developing the curriculum. The curriculum has been formulated to satisfy the rapidly changing needs of the society. The programmes are structured to provide a solid basis in Engineering and Technology, Humanities, and Sciences. The courses are designed to give a strong technical foundation as well as instill good human values. Other aspects of importance are interpersonal communication, environmental consciousness and societal concerns. The Choice Based Credit System (CBCS) is implemented with good number of electives as well as POs/PSOs/COs designed for all most of the programmes and these are published on the web site as well as placed in the respective departments. Awareness has been created among the students.

The curriculum is enriched by integrating Environmental Studies, Professional Ethics and Human Values, gender equality. In addition to the above, the curriculum also consists of courses like Universal Human Rights, Environmental Engineering etc. to enrich the students learning and experience.

Post graduate programme curriculum needs to be updated more regularly to keep them updated with current industrial trends and technological developments.

Criterion2	- Teaching-learning and Evaluation (Key Indicator and Qualitative Metrices(QlM) in Criterion2)		
2.1	Student Enrollment and Profile		
2.2	Catering to Student Diversity		
2.2.1	The institution assesses the learning levels of the students and organises		
QlM	special Programmes for advanced learners and slow learners		
2.3	Teaching- Learning Process		
2.3.1	Student centric methods, such as experiential learning, participative learning and problem		
QlM	solving methodologies are used for enhancing learning experiences		
2.3.2	Teachers use ICT enabled tools including online resources for effective teaching and		
QlM	learning process.		
2.4	Teacher Profile and Quality		
2.5	Evaluation Process and Reforms		
2.5.3	IT integration and reforms in the examination procedures and processes (continuous		
QIM	internal assessment and end-semester assessment) have brought in considerable		
	improvement in examination management system of the institution		
2.6	Student Performance and Learning Outcomes		
2.6.1	The institution has stated learning outcomes (generic and programme specific)/graduate		
QIM	attributes which are integrated into the assessment process and widely publicized through		
	the website and other documents		
2.6.2	Attainment of Programme outcomes, Programme specific outcomes and course outcomes		
QlM	are evaluated by the institution		
2.7	Student Satisfaction Survey		

## Qualitative analysis of Criterion 2

The University has taken up the Outcome Based Education philosophy in its true sense. Therefore, the University ensures that the Couse outcomes and programme outcomes are achieved through the teaching learning and evaluation process. More awareness has to be created among the students about the significance of learning outcomes.

The University has adopted the philosophy of continuous assessment instead of being dependent on the end semester evaluation alone. The attainment of POs, PSOs, and COs are evaluated through continuous evaluation and End Semester Examination. This process requires further improvement. For each of the theory course there are two continuous evaluations namely CA1 and CA2 and a Mid-semester examination. End semester examination is conducted to assess the overall understanding of the subject. For the lab courses the weightage is more on the continuous assessment. This is done through the experiments conducted, report writing, performance and understanding of the experiments during each laboratory session. The student is graded using the performance in CA1, CA2, Mid-semester Examination, and End Semester Examination. The examiners are encouraged to set the question papers as per the predefined CO-POs and BLOOM's Taxonomy. Innovative methods are followed for the evaluation like asking many practical oriented questions during teaching, giving assignments which will encourage the students for self-learning and online quizzes etc. to attain the subject specific COs, POs, and PSOs.

The student body consists of diverse sections of society, as the rules of admission as per government are followed.

Some faculty members are working assiduously towards student development, research and contributing to society, which is one of the strengths of the university.

Criterion3	- Research, Innovations and Extension (Key Indicator and Qualitative Metrices(QlM) in	
Criterion3	)	
3.1	Promotion of Research and Facilities	
3.1.1	The institution's Research facilities are frequently updated and there is a well defined	
QlM	policy for promotion of research which is uploaded on the institutional website and	
	implemented	
3.2	Resource Mobilization for Research	
3.3	Innovation Ecosystem	
3.3.1	Institution has created an eco system for innovations including Incubation centre and other	
QlM	initiatives for creation and transfer of knowledge.	
3.4	Research Publications and Awards	
3.5	Consultancy	
3.5.1	Institution has a policy on consultancy including revenue sharing between the institution	
QlM	and the individual and encourages its faculty to undertake consultancy.	
3.6	Extension Activities	
3.6.1	Extension activities in the neighbourhood community in terms of impact and sensitising	
QlM	students to social issues and holistic development during the last five years.	
3.7	Collaboration	

### Qualitative analysis of Criterion 3

Approximately 30 faculty members of the University are recognised as research guides. There are a number of research projects of approximate budget outlay of Rs.30 Cr from government funding and approx. Rs.15 lakhs from non-government funding agencies during assessment years. The projects have been funded by government agencies such as Rajiv Gandhi Science & Technology commission, RUSA, World Bank, MHRD, Bio-Tronics Equipment, ARA Freight Pune, to name a few.

A good amount has been generated by consultancy projects. 60 students were awarded Ph.Ds in last five years and a good number of publications were made in refereed journals and conferences. Teachers, research scholars and students have contributed significantly in books, chapters and papers in national and international conferences also. Seven (7) patents have been granted and more than 20 have been published in last 05 years. University has a consultancy policy in place and is supporting various agencies like Airport Development Authority etc.

A few awards have been presented to DBATU. The DBATU FORUM OF INNOVATION INCUBATION AND ENTERPRISE was Incorporated as a Section 8 company on November 4, 2019. Innovation & Incubation Centre of University, has been sanctioned a funding of Rs. 5 Crores from Government of Maharashtra out of which Rs.25 lakhs have been received to foster the culture of Innovation and Entrepreneurship in DBATU. More than 10 start-ups have been incubated.

Many functional MoUs are in place for the benefit of students in their research and project work. 05 Villages have been adopted and awareness activities on water conservation, Digital Literacy, Healthy lifestyle etc have been conducted. The University has contributed to the society and environment through the active participation of NSS volunteers in the activities organized at neighbourhood villages. The university organized a cleanliness drive, tree plantation, polio dose campaign, Shramadan program, self-defence program for girls, yoga training, a water conservation program. Awareness drives in the nearby villages on social issues such as gender equality, save girl child, drug addiction, eradicating superstitions, farmers' suicides, etc. were arranged.

Similarly, NCC UNIT, one of the vibrant units of University, performed many social and cultural activities throughout the year.

Criterion4	- Infrastructure and Learning Resources (Key Indicator and Qualitative Metrices(QlM) in		
Criterion4	·)		
4.1	Physical Facilities		
4.1.1	The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories,		
QlM	computing equipment, etc.		
4.1.2	The institution has adequate facilities for cultural activities, yoga, games and sports (indoor		
QlM	& outdoor); (gymnasium, yoga centre, auditorium, etc.,)		
4.1.3	Availability of general campus facilities and overall ambience		
QlM			
4.2	Library as a Learning Resource		
4.2.1	Library is automated using Integrated Library Management System (ILMS) and has		
QlM	digitisation facility		
4.3	IT Infrastructure		
4.3.2	Institution has an IT policy, makes appropriate budgetary provision and updates its IT		
QlM	facilities including Wi-Fi facility		
4.4	Maintenance of Campus Infrastructure		
4.4.2	There are established systems and procedures for maintaining and utilizing physical,		
QlM	academic and support facilities - laboratory, library, sports complex, computers, classrooms		
	etc.		

Qualitative analysis of Criterion 4

The main DBATU building, housing both academic departments and administration, is spacious and well planned. The laboratories are well equipped with state-of-the-art facilities. This helps to cultivate research and innovation. Basic laboratories in Electrical Department need to be improved.

The library is well stocked with issue books, reference books, book bank and SC/ST Book bank. Remote access to e-books is provided to faculty members and students, as well as to the regional centres. Students of affiliated colleges can access the digital library at these centres. LIBMAN and Nimbus are installed and are being utilised.

The University has good hostel accommodation for boys and girls, which provides accommodation for all those who need it. Basic sports facilities, both indoor and outdoor, have been provided.

Staff quarters are also provided for most of the regular/permanent faculty members.

A guest house in the campus provides accommodation for participants in faculty development programmes as well as for parents and visitors from the affiliated colleges.

Whereas the faculty members are participating actively towards institution building, it is felt that better facilities such as a good school for children of faculty members, and at least basic convenience shopping in a mobile facility would help in attracting more talent.

The civil engineering department of the university has designed and constructed '*bandhar*' (small dams) which helps in storing rain water. This helps in controlling the heavy inundation of land and the collected water is

provided through a system of jack wells and pipelines to surrounding 30 villages. This is a major initiative that was funded by the Rotary club of Pune, and that has impacted the surrounding community.

A digital studio has been provided to help teachers create e-content and several lectures have been recorded.

Administration use digital platforms for their day-to-day functioning. Examination process is completely digital, including evaluation system.

CCTV surveillance system is in place, and there are also security personnel on the premises.

Although the building is very well designed, the appearance would be more impressive and appealing once regular maintenance and painting of the building is taken up.

A new Classroom Complex is under construction.

Criterion5	Criterion5 - Student Support and Progression (Key Indicator and Qualitative Metrices(QlM) in Criterion5)		
5.1	Student Support		
5.2	Student Progression		
5.3	Student Participation and Activities		
5.3.2	Presence of Student Council and its activities for institutional development and student		
QlM	welfare.		
5.4	Alumni Engagement		
5.4.1	The Alumni Association / Chapters (registered and functional) contributes significantly to		
QlM	the development of the institution through financial and other support services.		

Qualitative analysis of Criterion 5

The students who are eligible receive government scholarships and also University fellowships have been established. Many other efforts are being made to make the students skilled and develop all round participation in various activities. These include yoga, Autocad workshop, coding competitions, and hackathons. Industrial visits and field trips are organised.

The Career Development Centre which looks after training and placement invites various companies to recruit students. However, there is scope for improvement. In these areas. The areas of shortfalls have been identified by the faculty in charge and a dedicated team to work on these gaps would help greatly. Activities such as coding competitions and better communication are needed to equip the students better for enhancing chances of placement. Some graduates have got placement in government and public sector organisations, and some have also established themselves as successful entrepreneurs.

There is good student participation in various committees such as hostel and mess committee. Students also actively participate in various cultural and sports activities including inter university competitions.

Various grievance committees have been constituted such as women's grievance cell, anti-ragging and university grievance redressal committee.

The alumni Association is registered and has a good membership contributing in various ways to the university

The NSS and NCC units are very proactive, and are helping to build an overall attitude of discipline and social service in the students.

Students are also encouraged to participate in various innovation competitions which are being conducted by the governor and other state organisations. The students have been faring well and winning prizes at these competitions.

The civil engineering department encourages all students to write the GATE exam, and helps in coaching students, apart from the other departments which also are working towards higher awareness of further education and career progression.

Criterion	- Governance, Leadership and Management (Key Indicator and Qualitative Metrices(QIM) in		
Criterion6			
6.1	Institutional Vision and Leadership		
6.1.1	The institution has a clearly stated vision and mission which are reflected in its academic		
QIM	and administrative governance.		
6.1.2	The effective leadership is reflected in various institutional practices such as		
QIM	decentralization and participative management.		
6.2	Strategy Development and Deployment		
6.2.1	The institutional Strategic plan is effectively deployed.		
QIM	The institutional strategic plan is enectively deployed.		
6.2.2	The functioning of the institutional bodies is effective and efficient as visible from policies,		
QIM			
6.3	administrative setup, appointment, service rules and procedures, etc.Faculty Empowerment Strategies		
6.3.1	The institution has a performance appraisal system, promotional avenues and effective		
QIM	welfare measures for teaching and non-teaching staff .		
6.4	Financial Management and Resource Mobilization		
6.4.1	Institutional strategies for mobilisation of funds and the optimal utilisation of resources		
	Institutional strategies for mobilisation of funds and the optimal utilisation of resources		
QlM 6.4.4	Institution conducts internal and external financial audits regularly		
	Institution conducts internal and external financial audits regularly		
QlM 6.5	Internal Quality Assurance System		
	Internal Quality Assurance System		
6.5.1	Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing		
QIM	the quality assurance strategies and processes by constantly reviewing the teaching learning		
	process, structures & methodologies of operations and learning outcomes at periodic		
(52	intervals.		
6.5.3	Incremental improvements made for the preceding five years with regard to quality (in case		
QlM	of first cycle), Post accreditation quality initiatives (second and subsequent cycles).		

Qualitative analysis of Criterion 6

Executive council, Academic Council, Finance Committee, Building Works committee, BOS, Planning and Evaluation committee are functioning as per university act.

Internal and External audit reports also available, surplus funds are reported in the audit reports. Budget utilisation is poor for the departments and more financial powers can be delegated to HOD for better utilisation of Dept budgets.

IQAC organises a number of FDP to increase awareness of OBE.

The University needs to develop an endowment fund, and needs to have high quality collaborative research with international universities.

Faculty vacant positions need to be filled to reduce the multiple responsibilities of the faculty members. The University supports research by giving grants and incentives for filing patents and attending conferences etc.

Performance appraisal system exists and with CAS there were 20 faculty members got promoted in 31.3.2021.

There was no power back up in the boys' hostels and hostel infrastructure needs lot of improvement in maintenance. Sports and auditorium facilities also need improvement to accommodate more students.

E-governance is implemented in Finance, Affiliation and Examination sections.

Criterion	7 - Institutional Values and Best Practices (Key Indicator and Qualitative Metrices(QlM) in		
Criterion	7)		
7.1	Institutional Values and Social Responsibilities		
7.1.1	Measures initiated by the Institution for the promotion of gender equity during the last five		
QlM	years.		
7.1.3	Describe the facilities in the Institution for the management of the following types of		
QIM	degradable and non-degradable waste (within 500 words)		
	Solid waste management		
	Liquid waste management		
	Biomedical waste management		
	• E-waste management		
	Waste recycling system		
	Hazardous chemicals and radioactive waste management		
7.1.8	Describe the Institutional efforts/initiatives in providing an inclusive environment i.e.,		
QlM	tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and		
	other diversities (within 500 words).		
7.1.9	Sensitization of students and employees of the Institution to the constitutional obligations:		
QlM	values, rights, duties and responsibilities of citizens (within 500 words).		
7.1.11	Institution celebrates / organizes national and international commemorative days, events		
QlM	and festivals (within 500 words).		
7.2	Best Practices		
7.2.1	Describe two best practices successfully implemented by the Institution as per NAAC format		
QlM	provided in the Manual.		
7.3	Institutional Distinctiveness		
7.3.1	Portray the performance of the Institution in one area distinctive to its priority and thrust		
QlM	within 1000 words		

Qualitative analysis of Criterion 7

Dr. Babasaheb Ambedkar Technological University has taken many measures for the promotion of gender equity by arranging functions and talks. University has women's grievance cell to safeguard and promote well-

being of all women employees and girl students of the organization.

LED bulbs are used to conserve energy. The facilities for the management of Liquid waste, Solid waste, Hazardous Chemical Waste are available at the Dr. Babasaheb Ambedkar Technological University, Lonere, but need to be further improved.

The University is conducting many programs to sensitize students about constitutional obligations. The University has a course on the Constitution of India.Expert talks are organised on days on national importnce and birth anniversary of eminent personalities like Chhatrapati Shivaji Maharaj Jayanti and Dr. Babasaheb Ambedkar Jayanti etc.

One best practice mentioned by University is "Free Medical Health Checkup and Free Treatment at University's Health Care Centre (HCC)" to provide - emergency and primary health care, guidance & counselling, free medical check-up, free medicines and advice. Whenever any emergency arises or any unfortunate accident happens, the students get urgent treatment as the University is located away from the city area.

Another best practice is 'Earn and Learn Scheme' to help poor and needy students in which a bicycle is provided to the needy student and in return he/she must do some Office work like maintenance and updating records, preparing reports etc.

Section III:OVERALL ANALYSIS based on Institutional strengths. Weaknesses, Opportunities & Challenges (SWOC) (up to 500 words)

## Overall Analysis

## Strength:

1. 1. Green campus with ample space is available for future expansion and construction of hostels/staff quarters/academic buildings.

2. Committed and dedicated faculty members in some departments have good potential for development of the university.

- 3. Well-functioning e-governance in Finance, Affiliation and Examination sections.
- 4. Availability of financial resources.
- 5. Bringing technical education to rural and remote regions of the State.

6. Some departments have high quality research labs, and these are also being shared with affiliated and other institutions.

7. The culture of Research and Consultancy is being encouraged and is one of the strengths.

8. Tribal Development Centre has been sanctioned.

9. NCC and NSS units are strong, and their impact is seen in the campus .

## Weaknesses:

- 1. Less number of regular Faculty members.
- 2. Quality Placement for students.
- 3. More classrooms are required, and equipped with ICT facilities.
- 4. Basic facilities such as shopping complex, school and creche are not available.
- 5. Coding culture and programming skills among students need to be improved.

## **Opportunities:**

- 1. Accreditation for various engineering programs by NBA.
- 2. Consultancy work and training programmes can be enhanced.
- 3. Guidance and counselling sessions for youth of surrounding areas can be taken up.
- 4. Mentoring of students needs to be done effectively.
- 5. Programmes in new and emerging technology areas can be started.
- 6. Better maintenance of Campus.

### Challenges:

- 1. To appoint Faculty members as well as administrative staff at senior level.
- 2. Perception of University and branding.
- 3. More International collaborations for research, student and faculty exchange can be taken up.
- 4. Attracting high ranking students for admission into the University.

#### Section IV:Recommendations for Quality Enhancement of the Institution

(Please limit to **ten major ones** and use telegraphic language) (It is not necessary to indicate all the ten bullets)

- University may apply for NBA Accreditation for eligible engineering programs.
- Outcome Based Education needs to be effectively implemented.
- Faculty Recruitment especially at senior level can be done.
- Efforts to improve quality placements need to be taken up by improving coding skills etc.
- Lecture Hall Complex with ICT facilities needs to be constructed
- Efforts to use non-renewable energy can be initiated by installing solar panels on all buildings.
- Promotion of non-teaching staff needs to be planned and implemented
- Student clubs and professional chapters in University are required.

### I have gone through the observations of the Peer Team as mentioned in this report

### Signature of the Head of the Institution

Seal of the Institution

Sl.No	Name		Signature with date
1	DR. KAVITA DARYANI RAO	Chairperson	
2	DR. SEEMA VERMA	Member Co-ordinator	
3	DR. MANOJ KUMAR	Member	
4	DR. PARAMMASIVAM K M	Member	
5	DR. JAYANT SONWALKAR	Member	
6	DR. YOGESH CHABA	Member	
7	Dr. M.s. Shyamasundar	NAAC Co - ordinator	

Place

Date