

Dr. Babasaheb Ambedkar Technological University, Lonere

B. Tech

First Year Engineering

Common to all branches for Affiliated colleges only

In line with National Education Policy 2020 guidelines

[With Effect from the Academic Year 2024-2025 for Affiliated Colleges Only]

First Year Teaching and Evaluation Scheme

GROUP A

Semester I											
Sr. No.	Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE	Total	
1	BSC	24AF1000BS101	Engineering Mathematics – I	3	0	0	20	20	60	100	3
2	BSC	24AF1CHEBS102	Engineering Chemistry	3	0	0	20	20	60	100	3
3	BSC	24AF1CHEBS103L	Engineering Chemistry Lab	0	0	2	60	—	40*	100	1
4	ESC	24AF1EMES104	Engineering Mechanics	3	0	0	20	20	60	100	3
5	ESC	24AF1EMES105L	Engineering Mechanics Lab	0	0	2	60	—	40*	100	1
6	ESC	24AF1000ES106	Programming for Problem Solving	2	0	0	20	20	60	100	2
7	ESC	24AF1000ES107L	Programming for Problem Solving Lab	0	0	2	60	—	40*	100	1
8	VSEC	24AF1000VS108L	Workshop Practices	0	0	4	60	—	40*	100	2
9	AEC-01	24AF1000VS109	Communication Skills	2	0	0	20	20	60	100	2
10	AEC-01	24AF1000VS110L	Communication Skills Lab	0	0	2	60	—	40*	100	1
11	CC	24AF1000CC111A	A. Yoga Education	1	0	2	60	—	40*	100	2
		24AF1000CC111B	B. NSS-I								
		24AF1000CC111C	C. NCC								
Total				14	0	14	460	100	540	1100	21

*Practical/Oral evaluation of 40 marks at the end of the semester.

†Presentation/Oral evaluation of 40 marks at the end of the semester.



GROUP A

Semester II											
Sr. No.	Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE	Total	
1	BSC	24AF1000BS201	Engineering Mathematics – II	3	0	0	20	20	60	100	3
2	BSC	24AF2PHYBS202	Engineering Physics	3	0	0	20	20	60	100	3
3	BSC	24AF2PHYBS203L	Engineering Physics Lab	0	0	2	60	–	40*	100	1
4	ESC	24AF2EGRES204	Engineering Graphics	2	0	0	20	20	60	100	2
5	ESC	24AF2EGRES205L	Engineering Graphics Lab	0	0	2	60	–	40*	100	1
6	ESC	24AF1000ES206	Basic Electrical and Electronics Engineering	3	0	0	20	20	60	100	3
7	ESC	24AF1000ES207L	Basic Electrical and Electronics Engineering Lab	0	0	2	60	–	40*	100	1
8	ESC	24AF2CMEE5208	Basic Civil and Mechanical Engineering	3	0	0	20	20	60	100	3
9	HSC	24AF1EEES209	Energy and Environmental Engineering	2	0	0	50	–	–	50	AU
10	IKS	24AF1000IK210	IKS Bucket #	2	0	0	60	–	40*	100	2
11	VSEC	24AF1000VS211	Design Thinking	2	0	0	60	–	40*	100	2
12	CC	24AF1000CC212A	A. Integrated Personality Development	1	0	2	60	–	40*	100	2
		24AF1000CC212B	B. NSS-II								
		24AF1000CC212C	C. Health and Wellness								
Total				21	0	8	310	100	540	1150	23

*Practical/Oral evaluation of 40 marks at the end of the semester.

†Presentation/Oral evaluation of 40 marks at the end of the semester.

Refer to the University website for the subjects under IKS bucket

Note: Students can complete online courses of 40% of total credits through online platform NPTEL / SWAYAM/ Sector Skill council of India and other online platforms identified by the University time to time. At least 80% contents of the NPTEL / SWAYAM/ Sector Skill council of India course should match with syllabus contents of the subject prescribed by the university.

Exit Option I: After completion of first year in engineering

Qualifier for One Year UG Certificate

Students opting for this option, should undergo the well-defined training/internship of 4-6 weeks which is equivalent to 4 Credits (120hrs) in the appropriate /relevant industry or organization.



GROUP B

Semester I											
Sr. No.	Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE	Total	
1	BSC		Engineering Mathematics – I	3	0	0	20	20	60	100	3
2	BSC		Engineering Physics	3	0	0	20	20	60	100	3
3	BSC		Engineering Physics Lab	0	0	2	60	—	40*	100	1
4	ESC		Engineering Graphics	2	0	0	20	20	60	100	2
5	ESC		Engineering Graphics Lab	0	0	2	60	—	40*	100	1
6	ESC		Basic Electrical and Electronics Engineering	3	0	0	20	20	60	100	3
7	ESC		Basic Electrical and Electronics Engineering Lab	0	0	2	60	—	40*	100	1
8	ESC		Basic Civil and Mechanical Engineering	3	0	0	20	20	60	100	3
9	BSC		Energy and Environmental Engineering	2	0	0	50	—	—	50	AU
10	IKS		IKS Bucket #	2	0	0	60	—	40*	100	2
11	VSEC		Design Thinking	2	0	0	60	—	40*	100	2
12	CC		A. Integrated Personality Development	1	0	2	60	—	40*	100	2
			B. NSS-II								
			C. Health and Wellness								
			Total	21	0	8	510	100	540	1150	23

*Practical/Oral evaluation of 40 marks at the end of the semester.

*Presentation/Oral evaluation of 40 marks at the end of the semester.

Refer to the University website for the subjects under IKS bucket



GROUP B

Semester II											
Sr. No.	Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
				L	T	P	CA	MSE	ESE	Total	
1	BSC		Engineering Mathematics II	3	0	0	20	20	60	100	3
2	BSC		Engineering Chemistry	3	0	0	20	20	60	100	3
3	BSC		Engineering Chemistry Lab	0	0	2	60	--	40*	100	1
4	ESC		Engineering Mechanics	3	0	0	20	20	60	100	3
5	ESC		Engineering Mechanics Lab	0	0	2	60	--	40*	100	1
6	ESC		Programming for Problem Solving	2	0	0	20	20	60	100	2
7	ESC		Programming for Problem Solving Lab	0	0	2	60	--	40*	100	1
8	VSEC		Workshop Practices	0	0	4	60	--	40*	100	2
9	AEC-01		Communication Skills	2	0	0	20	20	60	100	2
10	AEC-01		Communication Skills Lab	0	0	2	60	--	40*	100	1
11	CC		A. Yoga Education B. NSS-I C. NCC	1	0	2	60	--	40*	100	2
			Total	14	0	14	460	100	540	1100	21

*Practical/Oral evaluation of 40 marks at the end of the semester.

†Presentation/Oral evaluation of 40 marks at the end of the semester.

Note: Students can complete online courses of 40% of total credits through online platform NPTEL / SWAYAM/ Sector Skill council of India and other online platforms identified by the University time to time. At least 80% contents of the NPTEL / SWAYAM/ Sector Skill council of India course should match with syllabus contents of the subject prescribed by the university.

Exit Option I: After completion of first year in engineering Qualifier for One Year UG Certificate

Students opting for this option, should undergo the well-defined training/internship of 4-6 weeks which is equivalent to 4 Credits (120hrs) in the appropriate (relevant industry or organization).

