

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	24AF1CHEBSL103	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	24AF1EMESL105	Engineering Mechanics Lab	0	0	2	60	--	40*	100	1
6	ESC	24AF1000ES106A	Programming for Problem Solving	2	0	0	20	20	60	100	2
7	ESC	24AF1000ESL107A	Programming for Problem Solving Lab	0	0	2	60	--	40*	100	1
8	VSEC	24AF1000VSL108	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	24AF1000VSL110	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	24AF1PHYBS202	Engineering Physics	3	0	0	20	20	60	100	3
3	BSC	24AF1PHYBSL203	Engineering Physics Lab	0	0	2	60	--	40*	100	1
4	ESC	24AF1EGES204	Engineering Graphics	2	0	0	20	20	60	100	2
5	ESC	24AF1EGESL205	Engineering Graphics Lab	0	0	2	60	--	40*	100	1
6	ESC	24AF1000ES206A	Basic Electrical and Electronics Engineering	3	0	0	20	20	60	100	3
7	ESC	24AF1000ESL207A	Basic Electrical and Electronics Engineering Lab	0	0	2	60	--	40*	100	1
8	ESC	24AF1000ES208	Basic Civil and Mechanical Engineering	3	0	0	20	20	60	100	3
9	BSC	24AF1EEEEES209	Energy and Environmental Engineering	2	0	0	50	--	--	50	AU
10	IKS	24AF1000IKS210	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	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

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	24AF1000BS101	Engineering Mathematics – I	3	0	0	20	20	60	100	3
2	BSC	24AF1PHYBS102	Engineering Physics	3	0	0	20	20	60	100	3
3	BSC	24AF1PHYBSL103	Engineering Physics Lab	0	0	2	60	--	40*	100	1
4	ESC	24AF1EGES104	Engineering Graphics	2	0	0	20	20	60	100	2
5	ESC	24AF1EGESL105	Engineering Graphics Lab	0	0	2	60	--	40*	100	1
6	ESC	24AF1000ES106B	Basic Electrical and Electronics Engineering	3	0	0	20	20	60	100	3
7	ESC	24AF1000ESL107B	Basic Electrical and Electronics Engineering Lab	0	0	2	60	--	40*	100	1
8	ESC	24AF1000ES108	Basic Civil and Mechanical Engineering	3	0	0	20	20	60	100	3
9	BSC	24AF1EEEEES109	Energy and Environmental Engineering	2	0	0	50	--	--	50	AU
10	IKS	24AF1000IKS110	IKS Bucket #	2	0	0	60	--	40 [†]	100	2
11	VSEC	24AF1000VS111	Design Thinking	2	0	0	60	--	40 [†]	100	2
12	CC	24AF1000CC112A	A. Integrated Personality Development	1	0	2	60	--	40 [†]	100	2
		24AF1000CC112B	B. NSS-II								
		24AF1000CC112C	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	24AF1000BS201	Engineering Mathematics – II	3	0	0	20	20	60	100	3
2	BSC	24AF1CHEBS202	Engineering Chemistry	3	0	0	20	20	60	100	3
3	BSC	24AF1CHEBSL203	Engineering Chemistry Lab	0	0	2	60	--	40*	100	1
4	ESC	24AF1EMES204	Engineering Mechanics	3	0	0	20	20	60	100	3
5	ESC	24AF1EMESL205	Engineering Mechanics Lab	0	0	2	60	--	40*	100	1
6	ESC	24AF1000ES206B	Programming for Problem Solving	2	0	0	20	20	60	100	2
7	ESC	24AF1000ESL207B	Programming for Problem Solving Lab	0	0	2	60	--	40*	100	1
8	VSEC	24AF1000VSL208	Workshop Practices	0	0	4	60	--	40*	100	2
9	AEC-01	24AF1000VS209	Communication Skills	2	0	0	20	20	60	100	2
10	AEC-01	24AF1000VSL210	Communication Skills Lab	0	0	2	60	--	40*	100	1
11	CC	24AF1000CC211A	A. Yoga Education	1	0	2	60	--	40 [†]	100	2
		24AF1000CC211B	B. NSS-I								
		24AF1000CC211C	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.

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.