

FIRST YEAR CREDITS & COURSES

The VTU has prescribed the credits and courses for each cluster Cycle with number of hours per week for Theory, Laboratory and Tutorial. The institution follows the same pattern.

Scheme of First Semester for students of CSE Stream Physics Cycle (CSE / ISE / AIML)

The structure of UG programme in Engineering shall have essentially the following types of courses with the breakup of credits as shown against them:

Visvesvaraya Technological University, Belagavi - Scheme of Teaching and Examinations-2022 Outcome-Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2022-23)													
First Semester (CSE Stream)											(Physics Cycle)		
Sl. No	Course and course code		Course Title	Teaching Dept / PSB	Teaching Hours/Week					Examination			Credits
					Theory Lecture	Tutorial	Practical/ Drawing	SDA	Duration in hours	CIE Marks	SEE Marks	Total Marks	
1	*ASC(IC)	BMATS101	Mathematics-I for CSE stream	Mathematics	2	2	2	0	03	50	50	100	04
2	#ASC(IC)	BPHYS102	Applied Physics for CSE stream	Physics	2	2	2	0	03	50	50	100	04
3	ESC	BPOPS103	Principles of Programming Using C	CSE	2	0	2	0	03	50	50	100	03
4	ESC-I	BESCK104B	Introduction to Electrical Engineering	EEE	3	0	0	0	03	50	50	100	03
5	ETC-I	BETCK105E	Renewable Energy Sources	ME	3	0	0	0	03	50	50	100	03
6	AEC	BENGK106	Communicative English	Humanities	1	0	0	0	01	50	50	100	01
7	HSMC	BICOK107	Indian Constitution	Humanities	1	0	0	0	01	50	50	100	01
8	HSMS	BSFHK158	Scientific Foundations of Health	Chemistry	1	0	0	0	01	50	50	100	01
Total										400	400	800	20

SDA-Skill Development Activities, TD/PSB- Teaching Department / Paper Setting Board, ASC-Applied Science Course, ESC- Engineering Science Courses, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMC-Humanity and Social Science and Management Course, SDC- Skill Development Course, CIE-Continuous Internal Evaluation, SEE- Semester End Examination, IC - Integrated Course (Theory Course Integrated with Practical Course)

Scheme of First Semester for students of EEE Stream Chemistry Cycle

Visvesvaraya Technological University, Belagavi - Scheme of Teaching and Examinations-2022 Outcome-Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2022-23)													
First Semester (EEE Stream)											(Chemistry cycle)		
Sl. No	Course and course code		Course Title	Teaching Dept / PSB	Teaching Hours/Week					Examination			Credits
					Theory Lecture	Tutorial	Practical/ Drawing	SDA	Duration in hours	CIE Marks	SEE Marks	Total Marks	
1	*ASC(IC)	BMATE101	Mathematics-I for EEE stream	Mathematics	2	2	2	0	03	50	50	100	04
2	#ASC(IC)	BCHEE102	Chemistry for EES	Chemistry	2	2	2	0	03	50	50	100	04
3	ESC	BCEDK103	Computer-Aided Engineering Drawing	Mech Engg dept	2	0	2	0	03	50	50	100	03
4	ESC-I	BESCK104C	Introduction to Electronics Communication	EEE	3	0	0	0	03	50	50	100	03
5	ETC-I	BETCK105E	Renewable Energy Sources	ME / EEE	3	0	0	0	03	50	50	100	03
6	AEC	BENGK106	Communicative English	Humanities	1	0	0	0	01	50	50	100	01
7	HSMC	BICOK107	Indian Constitution	Humanities	1	0	0	0	01	50	50	100	01
8	SDC	BSFHK158	Scientific Foundations for Health	Chemistry	1	0	0	0	01	50	50	100	01
Total										400	400	800	20

SDA-Skill Development Activities, TD/PSB- Teaching Department / Paper Setting Board, ASC-Applied Science Course, ESC- Engineering Science Courses, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMS-Humanity and Social Science and Management Course, SDC- Skill Development Course, CIE-Continuous Internal Evaluation, SEE- Semester End Examination, IC - Integrated Course (Theory Course Integrated with Practical Course)

*- BMATE101 Shall have the 03 hours of theory examination (SEE), however, practical sessions question shall be included in the theory question papers. ** Mathematics subject should be taught by a single faculty member per division, with no sharing of the course(subject)module-wise by different faculty members.

#- BCHEE102- SEE shall have the 03 hours of theory examination and 02-03 hours of practical examination

ESC or ETC of 03 credits Courses shall have only a theory component (L:T :P:S=3:0:0:0) or if the nature the of course required practical learning, syllabus shall be designed as an Integrated course (L:T:P:S= 2:0:2:0)

All 01 Credit- courses shall have the SEE of 01 hours duration and the pattern of the question paper shall be MCQ

Scheme of First Semester for students of ME Stream Chemistry Cycle

Visvesvaraya Technological University, Belagavi - Scheme of Teaching and Examinations-2022

Outcome-Based Education (OBE) and Choice Based Credit System (CBCS)

(Effective from the academic year 2022-23)

First Semester (ME Stream)

(Chemistry cycle)

Sl. No	Course and course code		Course Title	Teaching Dept /PSB	Teaching Hours/Week				Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	SDA	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P	S					
1	ASC (IC)	BMATM101	Mathematics-I for ME Stream	Mathematics	2	2	2	0	03	50	50	100	04
2	ASC (IC)	BCHEM102	Applied Chemistry for ME Stream	Chemistry	2	2	2	0	03	50	50	100	04
3	ESC	BCEDK103	Computer-Aided Engineering Drawing	ME	2	0	2	0	03	50	50	100	03
4	ESC-I	BESCK104C	Introduction to Electronics Communication	EEE	3	0	0	0	03	50	50	100	03
5	ETC-I	BETCK105E	Renewable Energy Sources	EE/ME	2	0	2	0	03	50	50	100	03
6	AEC	BENGK106	Communicative English	Humanities	1	0	0	0	01	50	50	100	01
7	HSMC	BICOK107	Indian Constitution	Humanities	1	0	0	0	01	50	50	100	01
8	SDC	BSFHK158	Scientific Foundations for Health	Chemistry	1	0	0	0	01	50	50	100	01
Total										400	400	800	20

SDA-Skill Development Activities, TD/PSB- Teaching Department / Paper Setting Board, ASC-Applied Science Course, ESC- Engineering Science Courses, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMS-Humanity and Social Science and management Course, SDC- Skill Development Course, CIE - Continuous Internal Evaluation, SEE- Semester End Examination, IC - Integrated Course (Theory Course Integrated with Practical Course).

BMATM101 Shall have the 03 hours of theory examination (SEE), however, practical sessions question shall be included in the theory question papers. ** Mathematics should be taught by a single faculty member per division, with no sharing of the course (subject) module-wise by different faculty members.

BCHEM102- SEE shall have the 03 hours of theory examination and 02-03 hours of practical examination

ESC or ETC of 03 credits Courses shall have only a theory component (L:T:P:S=3:0:0:0) or if the nature the of course required practical learning syllabus shall be designed as an Integrated course (L:T:P:S= 2:0:2:0)

Scheme of Second Semester for students of CSE Stream Chemistry Cycle (CSE / ISE / AIML)

Visvesvaraya Technological University, Belagavi - Scheme of Teaching and Examinations-2022

Outcome-Based Education (OBE) and Choice Based Credit System (CBCS)

(Effective from the academic year 2022-23)

Second Semester (CSE Stream)

(Chemistry cycle)

Sl. No	Course and course code		Course Title	Teaching Dept /PSB	Teaching Hours/Week				Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	SDA	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P	S					
1	*ASC (IC)	BMATS201	Mathematics-II for CSE Cycle	Mathematics	2	2	2	0	03	50	50	100	04
2	#ASC (IC)	BCHEM202	Applied Chemistry for CSE Cycle	Chemistry	2	2	2	0	03	50	50	100	04
3	ESC	BCEDK203	Computer-Aided Engineering Drawing	ME	2	0	2	0	03	50	50	100	03
4	ESC-II	BESCK204C	Introduction to Electronics Communication	EEE	3	0	0	0	03	50	50	100	03
5	PLC-II	BPLCK205B	Introduction to Python Programming	CSE	3	0	0	0	03	50	50	100	03
6	AEC	BPWSK206	Professional Writing Skills in English	Humanities	1	0	0	0	01	50	50	100	01
7	HSMC	BKSKK207/ BKBKK207	Sanskritika Kannada / Balake Kannada	Humanities	1	0	0	0	01	50	50	100	01
8	SDC	BIDTK258	Innovation and Design Thinking	ME	1	0	0	0	01	50	50	100	01
Total										400	400	800	20

Scheme of Second Semester for students of EEE Stream Physics Cycle

Visvesvaraya Technological University, Belagavi - Scheme of Teaching and Examinations-2022														
Outcome-Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2022-23)														
Second Semester (EEE Stream)										(Physics cycle)				
Sl. No	Course and course code		Course Title	Teaching Dept /PSB	Teaching Hours/Week				Examination				Credits	
					Theory Lecture	Tutorial	Practical/ Drawing	SDA	Duration in hours	CIE Marks	SEE Marks	Total Marks		
					L	T	P	S						
1	ASC (IC)	BMATE201	Mathematics-II for EES	Mathematics	2	2	2	0	03	50	50	100	04	
2	ASC (IC)	BPHYE202	Applied Physics for EES	PHY	2	2	2	0	03	50	50	100	04	
3	ESC	BEMEE203	Elements of Electrical Engineering	EEE	2	0	2	0	03	50	50	100	03	
4	ESC-II	BESCK204D	Introduction to Mechanical Engineering	ME	3	0	0	0	03	50	50	100	03	
5	PLC-II	BPLCK205B	Introduction to Python Programming	CSE	3	0	0	0	03	50	50	100	03	
6	AEC	BPWSK206	Professional Writing Skills in English	Humanities	1	0	0	0	01	50	50	100	01	
7	HSMC	BKSKK207/ BKBKK207	Sanskrutika Kannada / Balake Kannada	Humanities	1	0	0	0	01	50	50	100	01	
8	SDC	BIDTK258	Innovation and Design Thinking	ME	1	0	0	0	01	50	50	100	01	
Total										400	400	800	20	
SDA-Skill Development Activities, TD/PSB- Teaching Department / Paper Setting Board, ASC-Applied Science Course, ESC- Engineering Science Courses, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMS-Humanity and Social Science and management Course, SDC- Skill Development Course, CIE-Continuous Internal Evaluation, SEE- Semester End Examination, IC - Integrated Course (Theory Course Integrated with Practical Course)														

Scheme of Second Semester for students of ME Stream Physics Cycle

Visvesvaraya Technological University, Belagavi - Scheme of Teaching and Examinations-2022														
Outcome-Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2022-23)														
Second Semester (ME Stream)										(Physics cycle)				
Sl. No	Course and course code		Course Title	Teaching Dept /PSB	Teaching Hours/Week				Examination				Credits	
					Theory Lecture	Tutorial	Practical/ Drawing	SDA	Duration in hours	CIE Marks	SEE Marks	Total Marks		
					L	T	P	S						
1	ASC (IC)	BMATM201	Mathematics-II for ME Streams	Mathematics	2	2	2	0	03	50	50	100	04	
2	ASC (IC)	BPHYM202	Applied Physics for ME Streams	PHY	2	2	2	0	03	50	50	100	04	
3	ESC	BEMEM203	Elements of Mechanical Engineering	ME	2	0	2	0	03	50	50	100	03	
4	ESC-II	BESCK204B	Introduction to Electrical Engineering	EEE	3	0	0	0	03	50	50	100	03	
5	PLC-II	BPLCK205B	Introduction to Python Programming	CSE	3	0	0	0	03	50	50	100	03	
6	*AEC	BPWSK206	Professional Writing Skills in English	Humanities	1	0	0	0	01	50	50	100	01	
7	HSMC	BKSKK207/ BKBKK207	Sanskrutika Kannada / Balake Kannada	Humanities	1	0	0	0	01	50	50	100	01	
8	SDC	BIDTK258	Innovation and Design Thinking	ME	1	0	0	0	01	50	50	100	01	
Total										400	400	800	20	
SDA-Skill Development Activities, TD/PSB- Teaching Department / Paper Setting Board, ASC-Applied Science Course, ESC- Engineering Science Courses, ETC- Emerging Technology Course, AEC- Ability Enhancement Course, HSMS-Humanity and Social Science and management Course, SDC- Skill Development Course, CIE-Continuous Internal Evaluation, SEE- Semester End Examination, IC - Integrated Course (Theory Course Integrated with Practical Course)														

Elective courses to be study in First / Second Semester

(ESC-I / II) Engineering Science Courses-I / II					(ETC-I / II) Emerging Technology Courses-I / II				
Code	Title	L	T	P	Code	Title	L	T	P
BESCK104A/204A	Introduction to Civil Engineering	3	0	0	BETCK105A/205A	Smart Materials and Systems	3	0	0
BESCK104B/204B	Introduction to Electrical Engineering	3	0	0	BETCK105B/205B	Green Buildings	3	0	0
BESCK104C/204C	Introduction to Electronics Communication	3	0	0	BETCK105C/205C	Introduction to Nano Technology	3	0	0
BESCK104D/204D	Introduction to Mechanical Engineering	3	0	0	BETCK105D/205D	Introduction to Sustainable Engineering	3	0	0
BESCK104E/204E	Introduction to C Programming	2	0	2	BETCK105E/205E	Renewable Energy Sources	3	0	0
					BETCK105F/205F	Waste Management	3	0	0
					BETCK105G/205G	Emerging Applications of Biosensors	3	0	0
					BETCK105H/205H	Introduction to Internet of Things (IOT)	3	0	0
					BETCK105I/205I	Introduction to Cyber Security	3	0	0
					BETCK105J/205J	Introduction to Embedded System	3	0	0
(PLC-I / II) Programming Language Courses-I / II									
Code	Title	L	T	P					
BPLCK105A/205A	Introduction to Web Programming	2	0	2					
BPLCK105B/205B	Introduction to Python Programming	2	0	2					
BPLCK105C/205C	Basics of JAVA programming	2	0	2					
BPLCK105D/205D	Introduction to C++ Programming	2	0	2					
The course 22ESC145/245, Introduction to C Programming, and all courses under PLC and ETC groups can be taught by ANY DEPARTMENT									

Note:

- The student has to register one course from ESC in each semester of first year
- The student has to register for minimum of one course in ETC and PLC in the First year of study.

Student's Induction Program: Motivating (Inspiring) Activities under the Induction program – The main aim of the induction program is to provide newly admitted students a broad understanding of society, relationships, and values. Along with the knowledge and skill of his/her study, students' character needs to be nurtured as an essential quality by which he/she would understand and fulfill the responsibility as an engineer. The following activities are to be covered in 21 days. Physical Activity, Creative Arts, Universal Human Values, Literary, Proficiency Modules, Lectures by Eminent People, Visits to Local areas, Familiarization with Department/Branch and Innovation, etc.

AICTE Activity Points to be earned by students over and above the academic grades, every regular student admitted to the 4 years Degree program, shall earn 100 points and every student entering 4 years Degree programs through lateral entry shall earn 75 Activity Points respectively for the award of degree through AICTE Activity Point Program. Students transferred from other Universities to the fifth semester are required to earn 50 Activity Points from the year of entry to VTU. The Activity Points earned shall be reflected on the student's eighth semester Grade Card.

The activities can be spread over the years, any time during the semester weekends, and holidays, as per the liking and convenience of the student from the year of entry to the program. However, the minimum hours' requirement should be fulfilled. Activity Points (non-credit) do not affect SGPA/CGPA and shall not be considered for vertical progression.

- To succeed a student, need to understand the institution's system and process.
- Track your attendance as minimum requirement is 85%.
- Keep your eyes and ears open and understand areas where competence is required.
- Select electives of your passion and try to think of applying your knowledge
- Clarify whenever you are in doubt
- Participate in extracurricular and co-curricular activities of your choice
- Empathy and concern for others is the way to help yourself.
- Remember failure is the step for success, success is in your hands.