



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

ವಿಜಯ ಅಧಿನಿಯಮ ೧೯೯೪ ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯವಿಶ್ವವಿದ್ಯಾಲಯ

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

State University of Government of Karnataka Established as per the VTU Act, 1994 "JnanaSangama" Belagavi-590018, Karnataka, India

Prof. B. E. Rangaswamy, Ph.D

Phone: (0831) 2498100

REGISTRAR

Fax: (0831) 2405467

REF: VTU/BGM/BOS/AEC-SEE details/2023-24/ 4986

DATE:

19 DEC 2023

CIRCULAR

Subject: SEE details of the courses of AEC of 5th semester 2021 scheme regarding...

Reference: Approved by the Chairpersons BoS VTU Belagavi.

The 2021 scheme contains one credit course under the Ability enhancement/Skill enhancement category, out of which employ the semester-end evaluation (SEE) pattern, either **MCQ / Practical /Theory**. This circular includes a list of AEC courses of the 5th semester 2021 scheme UG programs, as well as SEE information.

All the principals of affiliated and constituent engineering colleges are hereby informed to bring the content of the circular to the notice of all students and teachers concerned. If any clarification is needed email to sbhalbhavi@vtu.ac.in.

Thanking you

R. E. 19/12/23
REGISTRAR
19/12/23

To,

1. All the Principals of all affiliated, constituent Engineering Colleges under the ambit of the university.
2. The Chairpersons /Program Coordinator of the University departments at Kalaburagi, Mysuru Belagavi, and Muddenhalli Bengaluru

CC to

- The Hon'ble Vice-Chancellor through the secretary to VC for information
- The Registrar (Evaluation) for information
- The Dean Faculty of Engineering, VTU Belagavi
- The Director ITI, SMU VTU Belagavi for information and request to upload the circular on VTU web portal.
- The Office copy

Ability Enhancement Course(AEC) -V semester 2021 Scheme

SL No	Course	Code	Course Title	Credit	SEE	Duration	REMARK
1	Aeronautical Engineering	21AE581	DRONE Pilot Training	1	MCQ	01 Hour	
2		21AE582	Introduction to Swarm Drone	1	MCQ	01 Hour	
3		21AE583	Virtual Aircraft Simulation	1	MCQ	01 Hour	
4		21AE584	Multi-disciplinary Research in Aeronautical Engineering	1	MCQ	01 Hour	
5	Aerospace Engineering	21AS581	Probability and Statistics for Aerospace Engineering	1	MCQ	01 Hour	Theory
6		21AS582	Introduction to Data Analytics	1	MCQ	01 Hour	Theory
7		21AS583	Virtual Aircraft Simulation	1	MCQ	01 Hour	Theory
8		21AS584	Air and Missile Defence Systems	1	MCQ	01 Hour	Theory
9	Automobile Engineering	21AU581	Automotive Heating, Ventilation and Air conditioning	1	MCQ	01 hour	
10		21AU582	Digital Twin	1	MCQ	01hour	
11		21AU583	Programming for Automobile engineers	1	MCQ	01hour	
12		21AU584	Battery management system	1	MCQ	01 hour	
13	Biotechnology	21BT581	Bio-Innovation and Start-ups	1	MCQ	01 hour	Theory
14		21BT582	Extraction Methods and Herbal products	1	MCQ	01 hour	Theory
15		21BT583	Modelling and Simulations in Biology	1	MCQ	01 hour	Theory
16		21BT584	Good Manufacturing and Laboratory Practices	1	MCQ	01 hour	Theory
17	Chemical Engineering	21CH581	Energy and Environmental Auditing	1	MCQ	01 hour	
18		21CH582	Problem Based Learning (Case Studies)	1	MCQ	01 hour	
19	Civil Engineering	21CV581	Data Analysis with Python	1	MCQ	01 hour	
20		21CV582	Software Applications	1	MCQ	01 hour	
21		21CV583	Gender Sensitization	1	MCQ	01 hour	
22		21CV584	Quality Control and Quality Assurance	1	MCQ	01 hour	
23		21CV585	Offshore Structures	1	MCQ	01 hour	
24	Mining Engineering	21MNL581	Introduction to IOT	1	Practical	2 Hour	
25		21MN582	Gender Sensitisation	1	MCQ	01 hour	
26		21MN583	Industry 4.0	1	MCQ	01 hour	
27	Computer Science and Engineering	21CSL581	Angular JS	1	practical	2 Hour	
28		21CSL582	C# Programming	1	practical	2 Hour	21CSL582 (Syllabus)
29	Information Science	21CSL581	Angular JS	1	practical	2 Hour	

30	and Engineering	21CSL582	C# Programming	1	practical	01 hour	
31	AIML	21CSL581	Angular JS	1	practical	2 Hour	
32		21CSL582	C# Programming	1	practical	01 hour	
33	CSE(AIML)	21CSL581	Angular JS	1	practical	2 Hour	
34		21CSL582	C# Programming	1	practical	01 hour	
35	Data Science	21CSL581	Angular JS	1	practical	2 Hour	
36		21CSL582	C# Programming	1	practical	01 hour	
37	CSE(Data Science)	21CSL581	Angular JS	1	practical	2 Hour	
38		21CSL582	C# Programming	1	practical	01 hour	
39	AIDS	21CSL581	Angular JS	1	practical	2 Hour	
40		21CSL582	C# Programming	1	practical	01 hour	
41	CSE(AI)	21CSL581	Angular JS	1	practical	2 Hour	
42		21CSL582	C# Programming	1	practical	01 hour	
43	CBCS	21CB581	SOFTWARE DESIGN AND DESIGN THINKING	1	MCQ	01 hour	
44		21CB582	FINANCIAL MANAGEMENT	1	MCQ	01 hour	
45		21CBL583	Angular JS	1	practical	2 Hour	
46		21CBL584	C# Programming	1	practical	2 Hour	
47	CSE(IoT CS BCT)	21CSL581	Angular JS	1	practical	2 Hour	
48		21CSL582	C# Programming	1	practical	01 hour	
49	CS & design	21CSL581	Angular JS	1	practical	2 Hour	
50		21CSL582	C# Programming	1	practical	01 hour	
51	Electronics and Communication Engineering (ECE)	21EC581	IoT (Internet of Things) Lab	1	Practical	2 Hour	
52		21EC582	Communication Simulink Toolbox	1	Practical	2 Hour	
53		21EC583	Java Programming	1			No Syllabus
54		21EC584	Data Structures Using C++	1			No Syllabus
55	Electronics and Telecommunication	21EC581	IoT (Internet of Things) Lab	1	Practical	2 Hour	
56		21EC582	Communication Simulink Toolbox	1	Practical	2 Hour	
57		21EC583	Java Programming	1			No Syllabus
58		21EC584	Data Structures Using C++	1			No Syllabus
59	Electronics and Instrumentation	21EI581	Arduino and Raspberry Pi Lab	1	practical	2 Hour	
60		21EI582	Internet of Things	1	MCQ	01 hour	21EI/BM582

61	Instrumentation Engineering	21EI583	Octave / Scilab for Signal Analysis Lab		practical	2 Hour	21EI/BM583
62		21EI584	OpenPLC / Ladder Diagram Programming Lab	1	practical	2 Hour	
63	Biomedical	21BM581	Arduino and Raspberry Pi Lab	1	Practical	2 Hour	
64		21BM582	Internet of Things	1	MCQ	01 hour	
65		21BM583	Octave / Scilab for Signal Analysis Lab	1	practical	2 Hour	
66		21BM584	Python Programming	1	MCQ	01 hour	
67	Electrical & Electronics Engineering	21EEL581	Scilab for Analysis of Power Systems	1	practical	2 Hour	
68		21EEL582	Scilab for Power Electronics	1	Practical	2 Hour	
69		21EEP583	Energy Audit Project	1	Mini Project	2 Hour	
70		21EEP584	Renewable Energy Project	1	Mini Project	2 Hour	
71	Industrial and Production Engineering	21IP/IM581	Elements of Developing Management Skills	1	MCQ	01 hour	
72		21IP/IM582	Basics of Rapid Prototyping	1	MCQ	01 hour	
73		21IP/IM583	Introduction to Maintenance Engineering	1	MCQ	01 hour	
74	Industrial Engineering and Management	21IP/IM581	Elements of Developing Management Skills	1	MCQ	01 hour	
75		21IP/IM582	Basics of Rapid Prototyping	1	MCQ	01 hour	
76		21IP/IM583	Introduction to Maintenance Engineering	1	MCQ	01 hour	
77	Mechanical Engineering	21ME581	Basics of MATLAB(0-0-2-0)	1	Practical	2 Hour	
78		21ME582	Digital Marketing (0-2-0-0)	1	MCQ	01 hour	
79		21ME583	VFX – Visual Effects (0-2-0-0)	1	MCQ	01 hour	
80	Marine Engineering	21MR581	Introduction to AI and ML (1-0-0-0)	1	MCQ	01 hour	
81		21MR582	Sensors and actuators (1-0-0-0)	1	MCQ	01 hour	
82		21MR583	Seamanship and navigation (1-0-0-0)	1	MCQ	01 hour	
83	Mechatronics Engineering	21MT581	MATLAB for Mechatronics (0-0-2)	1	Practical	2 Hour	
84		21MT582	Embedded systems (0-0-2)	1	Practical	2 Hour	
85		21MT583	Finite Element Modelling and Analysis (0-0-2)	1	Practical	2 Hour	
86		21MT584	AI and ML (0-0-2)	1	Practical	2 Hour	
87	Mechanical and Smart Manufacturing	21SM581	Introduction to Robotics and Automation	1	MCQ	01 hour	
88		21SM582	Special Manufacturing Processes	1	MCQ	01 hour	
89	Robotics & Automation	21RA581	Medical Robotics	1	MCQ	01 hour	
90		21RA582	Deep Learning for Computer Vision	1	Practical	2 Hour	

91	Automation	21RA583	Mobile Robotics	1	MCQ	01 hour	
92	Agricultural Engineering	21AG581	Introduction to Augmented Reality and Web design	1	MCQ	01 hour	
93		21AG582	Digital marketing	1	MCQ	01 hour	
94		21AG583	Basics of MAT Lab	1	Practical	02 hours	
95	Automation & Robotics	21AR581	Medical Robotics	1	MCQ	01 hour	
96		21AR582	Deep Learning for Computer Vision	1	Practical	2 Hour	
97		21AR583	Mobile Robotics	1	MCQ	01 hour	
98	Robotics & Artificial Intelligence	21RI581	Medical Robots(1:0:0:0)	1	MCQ	01 hour	
99		21RI582	Basics of MATLAB(0:0:2:0)	1	practical	2 Hour	
100	Silk Technology	21TX583	Textured Yarn Technology	1	MCQ	01 hour	Theory
101		21TX584	Fibre Reinforced Composites	1	MCQ	01 hour	
102	Textile Technology	21TX583	Textured Yarn Technology	1	MCQ	01 hour	Theory
103		21TX584	Fibre Reinforced Composites	1	MCQ	01 hour	