



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ
ವಿಟೀಯು ಅಧಿನಿಯಮ ೧೯೯೪ರ 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
REGISTRAR

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REF: VTU/BGM/PG-AEC-SEE related /782/2024-25/ 1512

DATE: 8 JUL 2025

CIRCULAR

Subject: Clarification Regarding 1-Credit AEC/SEC Courses – Semester End Examination (SEE)

Reference:

1. Syllabus PG programmes of scheme 2024
2. VTU/BGM/PG Online Courses/764/2024-25/806, dated:

This is with reference to the subject cited above. It has come to our notice that errors have been identified in the Semester End Examination (SEE) section of the syllabus, particularly concerning 1-credit Ability Enhancement Courses (AEC) / Skill Enhancement Courses (SEC).

In light of the upcoming examinations, the following clarifications are issued for the benefit of:

- Question paper setters
- Faculty members handling AEC/SEC courses
- Students registered for these courses and appearing for the SEE

Assessment Details (both CIE and SEE)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark **for the CIE is 50% of the maximum marks**. Minimum passing marks **in SEE is 40% of the maximum marks of SEE**. A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course if the student secures not less than **50% (50 marks out of 100)** in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together

1. The SEE for 01 credit AEC/SEC courses is written as theory with MCQ type question papers

Semester End Examinations (SEE)

SEE paper shall be set for 50 questions, each of the 01 marks. The pattern of the question paper is MCQ (multiple choice questions). The time allotted for SEE is **01 hour**. The student has to secure a minimum of 40% of the maximum marks meant for SEE.

Examination duration is 01 hour

2. The SEE for 01 credit AEC/SEC courses is written as theory question papers

Semester End Examinations (SEE)

- a. The question paper shall consist of ten questions, with each question carrying 10 marks.
 - b. There shall be two questions from each module. Each question may or may not include sub-questions (with a maximum of two sub-questions). The mark distribution for sub-questions may follow any of the following formats: 5+5, 4+6, or 3+7.
 - c. Students are required to answer any five full questions, selecting one full question from each module.
 - d. In order to pass the SEE, students must obtain a minimum of 40% of the maximum marks allotted for the examination.
 - e. The maximum duration of the examination is 02 hours
3. Each respective Board of Studies (BoS) has announced a list of approved online courses carrying 01 credit and more under Ability Enhancement Courses (AEC) and Skill Enhancement Courses (SEC). These online courses are made available to facilitate students who wish to opt for alternative subjects in lieu of the listed AEC/SEC courses in their program.

In cases where the AEC syllabus specific to a program is not listed in the current scheme, students are permitted to choose and complete the approved online courses from the announced list.

These clarifications are intended to ensure uniformity and proper conduct of the SEE for 1-credit AEC/SEC courses.

All the Principals of constituent and affiliated engineering colleges are hereby informed to bring this to the notice of the concerned faculty and students, and to ensure strict adherence to the same.

Sd/-

REGISTRAR

To,

**The principals of all Engineering Colleges under the ambit of the university, Belagavi
The Chairpersons /Program Coordinators of the university Departments at Kalburgi,
Mysuru, Bengaluru, and Belagavi**

Copy to

1. The Hon'ble Vice-Chancellor, through the Secretary to VC for information
2. The Registrar (Evaluation) VTU Belagavi for information and needful
3. The Chairpersons and members of BoS and BOE of the VTU Belagavi
4. The Director, ITI SMU VTU Belagavi, for information and to make arrangements to upload the circular on the VTU web portal for stakeholders' reference.
5. The Special Officer, QPDS section, for information and needful
6. Office Copy.

R 08/02/2020 RE
REGISTRAR
[Signature]

Master of Technology (2024 Scheme PG)

Biotechnology and Biochemical Engineering

SCHEME				
S.N	Code	Title	Credit	AEC Type
1	MBBC258A	BIOPROCESS CONTROL AND AUTOMATION LAB	1	Practical
2	MBBCL258B	BIOPROCESSING LAB	1	Practical
3	MBBCL258C	R PROGRAMMING FOR BIOLOGISTS LAB	1	Practical
4	MBBCL258D	BIOSTATISTICS AND TOOL LAB	1	Practical
5	MBBCL258E	BIOHAZARDS AND BIOSAFETY LAB	1	Practical

Food Technology

1	MFD258A	Food Biotechnology Laboratory	1	Practical
2	MFD258B	Food Microbiology Lab	1	Practical
2	MFD258C	Food Analysis Lab	1	Practical
3	MFD258D	Biostatistic and tool Lab	1	Practical
4	MFD258E	BioHazard and Bio safety Lab	1	Practical
5	MFD258F	Nutraceutical Analysis Lab	1	Practical

CIVIL ENGINEERING SCIENCES

1	Computer Aided Design of Structures			
2	Computer Aided Structural Engineering			
3	Construction Technology			
4	Environmental Engineering			

Geotechnical Engineering

1	MCGT258A	Forensic Geotechnical Engineering	1	MCQ
2	MCGT258B	Environmental Geotechnical Engineering	1	MCQ
3	MCGT258C	Occupational safety and health Management in construction projects	1	MCQ
4	MCGT258D	IoT and Smart Cities	1	MCQ

Infrastructure Construction and Management

1	MCEM258A/ MCHT258A	OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT IN CONSTRUCTION PROJECTS	1	MCQ
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Biotechnology and Biochemical Engineering

SYLLABUS

Code	Title	Credit	AEC Type	Duration	
MBBC258A	BIOPROCESS CONTROL AND AUTOMATION LAB	1	Practical	2 Hours	MBBCL258A
MBBCL258B	BIOPROCESSING LAB	1	Practical	2 Hours	MBBCL258B
MBBCL258C	R PROGRAMMING FOR BIOLOGISTS LAB	1	Practical	2 Hours	MBBCL258C
MBBCL258D	BIOSTATISTICS AND TOOL LAB	1	Practical	2 Hours	MBBCL258D
MBBCL258E	BIOHAZARDS AND BIOSAFETY LAB	1	Practical	2 Hours	MBBCL258E

Food Technology

MFD27A	Food Biotechnology Laboratory	1	Practical	2 Hours	MFDTL258A
MFDTL258B	Food Microbiology Lab	1	Practical	2 Hours	MFDTL258B
MFDTL258C	Food Analysis Lab	1	Practical	2 Hours	MFDTL258C
MFDTL258D	Biostatistic and tool Lab	1	Practical	2 Hours	MFDTL258D
MFDTL258E	BioHazard and Bio safety Lab	1	Practical	2 Hours	MFDTL258E
MFD258F	Nutraceutical Analysis Lab	1	Practical	2 Hours	MFDTL258F

CIVIL ENGINEERING SCIENCES

Computer Aided Design of Structures					AEC is Online
Computer Aided Structural Engineering					AEC is Online
Construction Technology					AEC is Online
Environmental Engineering					AEC is Online

Geotechnical Engineering

MCGT258A	FORENSIC GEOTECHNICAL ENGINEERING	1	MCQ	1 Hour
MCGT258B	Environmental Geotechnical Engineering	1	MCQ	1 Hour
MCGT258C	OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT IN CONSTRUCTION PROJECTS	1	MCQ	1 Hour
MCGT258D	IoT AND SMART CITIES	1	MCQ	1 Hour

Infrastructure Construction and Management

MCEM258A/ MCHT258A	OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT IN CONSTRUCTION PROJECTS	1	MCQ	1 Hour
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To be Read as

2	MCEM258B/ MCHT258B	SMART CITY INFRASTRUCTURE	1	MCQ
3	MCEM258C/ MCHT258C	ROAD SAFETY ENGINEERING AND MANAGEMENT	1	MCQ
4	MCEM258D	URBAN PUBLIC TRANSPORT	1	MCQ

7	Structural Engineering			
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8	Transportation Engineering and Management			
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9	Transportation Engineering			
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10	Highway Technology			
1	MCHT258A/ MCEM258A	OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT IN CONSTRUCTION PROJECTS	1	MCQ
2	MCHT258B/ MCEM258B	SMART CITY INFRASTRUCTURE	1	MCQ
3	MCHT258C/ MCEM258C	ROAD SAFETY ENGINEERING AND MANAGEMENT	1	MCQ
4	MCHT258D	IoT AND SMART CITIES	1	MCQ

11	Waste Water Management, Health and Safety Engineering			
1	Ability Enhancement Scheme & Syllabus is Missing			

12	Geo-informatics			
1	Skill Enhancement For Research Excellence			

13	Infrastructure Engineering and Management			
1	MCEM258A/ MCHT258A	OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT IN CONSTRUCTION PROJECTS	1	MCQ
2	MCEM258B/ MCHT258B	SMART CITY INFRASTRUCTURE	1	MCQ
3	MCEM258C/ MCHT258C	ROAD SAFETY ENGINEERING AND MANAGEMENT	1	MCQ
4	MCEM258D	URBAN PUBLIC TRANSPORT	1	MCQ

14	Water Resources and Environmental Engineering			
	Skill Enhancement For Research Excellence			

Computer Engineering & Sciences				
Computer Engineering				
1	Skill Enhancement for Research Excellence			

Computer Network Engineering				
2	Skill Enhancement for Research Excellence			

Computer Science and Engineering				
3	Skill Enhancement for Research Excellence - I			

MCEM258B/ MCHT258B	SMART CITY INFRASTRUCTURE	1	MCQ	1 Hour
MCEM258C/ MCHT258C	ROAD SAFETY ENGINEERING AND MANAGEMENT	1	MCQ	1 Hour
MCEM258D	URBAN PUBLIC TRANSPORT	1	MCQ	1 Hour

Structural Engineering				
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Transportation Engineering and Management				
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Transportation Engineering				
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Highway Technology				
MCHT258A/ MCEM258A	OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT IN CONSTRUCTION PROJECTS	1	MCQ	1 Hour
MCHT258B/ MCEM258B	SMART CITY INFRASTRUCTURE	1	MCQ	1 Hour
MCHT258C/ MCEM258C	ROAD SAFETY ENGINEERING AND MANAGEMENT	1	MCQ	1 Hour
MCHT258D	IoT AND SMART CITIES	1	MCQ	1 Hour

Waste Water Management, Health and Safety Engineering				
Ability Enhancement Scheme & Syllabus is Missing				

Geo-informatics				
Skill Enhancement For Research Excellence				

Infrastructure Engineering and Management				
MCEM258A/ MCHT258A	OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT IN CONSTRUCTION PROJECTS	1	MCQ	1 Hour
MCEM258B/ MCHT258B	SMART CITY INFRASTRUCTURE	1	MCQ	1 Hour
MCEM258C/ MCHT258C	ROAD SAFETY ENGINEERING AND MANAGEMENT	1	MCQ	1 Hour
MCEM258D	URBAN PUBLIC TRANSPORT	1	MCQ	1 Hour

Water Resources and Environmental Engineering				
Skill Enhancement For Research Excellence				

Computer Engineering & Sciences				
Computer Engineering				
	Skill Enhancement for Research Excellence			

Computer Network Engineering				
	Skill Enhancement for Research Excellence			

Computer Science and Engineering				
	Skill Enhancement for Research Excellence - I			

AEC is Online

2nd Sem Scheme &
Syllabus Missing

2nd Sem Scheme &
Syllabus Missing

AEC is Online

Research Excellence

Research Excellence

Research Excellence

Research Excellence

Research Excellence

Information Technology			
4	Skill Enhancement for Research Excellence - I		
5 Software Engineering			
	Skill Enhancement for Research Excellence - I		
6 Cyber Forensic and Information Security			
	Skill Enhancement for Research Excellence - I		
7 Networking and Internet Engineering			
	Skill Enhancement for Research Excellence - I		
8 Artificial Intelligence And Machine Learning			
	Skill Enhancement for Research Excellence - I		
9 Data Science			
	Skill Enhancement for Research Excellence - I		
10 Artificial Intelligence and Data Science			
	Skill Enhancement for Research Excellence - I		
11 Cyber Security			
	Skill Enhancement for Research Excellence - I		
12 Web Technology			
	ONLY 1ST SEM SCHEME SYLLABUS AVAILABLE		

ELECTRONICS & COMMUNICATION ENGINEERING				
1 Communication Systems				
MLCSL258A	Modelling and Simulation of Antenna Using Simulation Tool	1	Practical	
MLCSL258B	MATLAB and Simulink	1	Practical	
MLCSL258C	Python Programming	1	Practical	
2 Digital Communication & Networking				
MLDNL258A	Modeling and Simulation of Antenna Using Simulation Tool	1	Practical	
MLDNL258B	MATLAB and Simulink	1	Practical	
MLDNL258C	Programming in JAVA	1	Practical	
MLDNL258D	Python Programming	1	Practical	
3 Digital Electronics & Communication				
MLECL258A	Modelling and Simulation of Antenna Using Simulation Tool	1	Practical	
MLECL258B	MATLAB and Simulink	1	Practical	
MLECL258C	Python Programming	1	Practical	
4 Digital Electronics & Communication Systems				
MLDSL258A	Modelling and Simulation of Antenna Using Simulation Tool	1	Practical	
MLDSL258B	MATLAB and Simulink	1	Practical	
MLDSL258C	Python Programming	1	Practical	
5 Digital Electronics				

Information Technology				
	Skill Enhancement for Research Excellence - I			Research Excellence
Software Engineering				
	Skill Enhancement for Research Excellence - I			Research Excellence
Cyber Forensic and Information Security				
	Skill Enhancement for Research Excellence - I			Research Excellence
Networking and Internet Engineering				
	Skill Enhancement for Research Excellence - I			Research Excellence
Artificial Intelligence And Machine Learning				
	Skill Enhancement for Research Excellence - I			Research Excellence
Data Science				
	Skill Enhancement for Research Excellence - I			Research Excellence
Artificial Intelligence and Data Science				
	Skill Enhancement for Research Excellence - I			Research Excellence
Cyber Security				
	Skill Enhancement for Research Excellence - I			Research Excellence
Web Technology				
	ONLY 1ST SEM SCHEME SYLLABUS AVAILABLE			2nd Sem Scheme & Syllabus Missing

ELECTRONICS & COMMUNICATION ENGINEERING					
Communication Systems					
MLCSL258A	Modelling and Simulation of Antenna Using Simulation Tool	1	Practical	2 Hours	
MLCSL258B	MATLAB and Simulink	1	Practical	2 Hours	
MLCSL258C	Python Programming	1	Practical	2 Hours	
Digital Communication & Networking					
MLDNL258A	Modelling and Simulation of Antenna Using Simulation Tool	1	Practical	2 Hours	
MLDNL258B	MATLAB and Simulink	1	Practical	2 Hours	
MLDNL258C	Programming in JAVA	1	Practical	2 Hours	
MLDNL258D	Python Programming	1	Practical	2 Hours	
Digital Electronics & Communication					
MLECL258A	Modelling and Simulation of Antenna Using Simulation Tool	1	Practical	2 Hours	
MLECL258B	MATLAB and Simulink	1	Practical	2 Hours	
MLECL258C	Python Programming	1	Practical	2 Hours	
Digital Electronics & Communication Systems					
MLDSL258A	Modelling and Simulation of Antenna Using Simulation Tool	1	Practical	2 Hours	
MLDSL258B	MATLAB and Simulink	1	Practical	2 Hours	
MLDSL258C	Python Programming	1	Practical	2 Hours	
Digital Electronics					

3

MLDE258A	Modeling and Simulation of Antenna Using Simulation Tool	1	Practical
MLDE258B	MATLAB and Simulink	1	Practical
MLDE258C	Python Programming	1	Practical

6 Electronics

MLEL258A	Refer www.online.vtu.ac.in	1	
MLEL258B	Refer www.online.vtu.ac.in	1	
MLEL258C	Refer www.online.vtu.ac.in	1	
MLEL258D	Refer www.online.vtu.ac.in	1	

7 Industrial Electronics

MLIE258A	Referwww.online.vtu.ac.in	1	
MLIE258B	Referwww.online.vtu.ac.in	1	
MLIE258C	Referwww.online.vtu.ac.in	1	
MLIE258D	Referwww.online.vtu.ac.in	1	

8 Signal Processing

MLSP288A	Referwww.online.vtu.ac.in	1	
MLSP288B	Referwww.online.vtu.ac.in	1	
MLSP288C	Referwww.online.vtu.ac.in	1	
MLSP288D	Referwww.online.vtu.ac.in	1	

9 VLSI Design and Embedded System (Affiliated)

MLEL258A	Referwww.online.vtu.ac.in	1	
MLEL258A	Referwww.online.vtu.ac.in	1	
MLEL258A	Referwww.online.vtu.ac.in	1	
MLEL258A	Referwww.online.vtu.ac.in	1	

10 Digital Communication Engineering

MLDC258A	Modeling and Simulation of Antenna Using Simulation Tool	1	Practical
MLDC258B	MATLAB and Simulink	1	Practical
MLDC258C	Programming in JAVA	1	Practical
MLDC258D	Python Programming	1	Practical

11 Electronics & Communication(VLSI Design)

MLEL258A	Referonline.vtu.ac.in/courses	1	
MLEL258B	Referonline.vtu.ac.in/courses	1	
MLEL258C	Referonline.vtu.ac.in/courses	1	
MLEL258D	Referonline.vtu.ac.in/courses	1	

12 Electronics & Communication(Advanced Communication Technology)

13 Biomedical Signal Processing and Instrumentation

MLBI288A	Referonline.vtu.ac.in/courses	1	
MLBI288B	Referonline.vtu.ac.in/courses	1	
MLBI288C	Referonline.vtu.ac.in/courses	1	
MLBI288D	Referonline.vtu.ac.in/courses	1	

14 Iot and Sensor System

MISS258A	Machine Learning	1	MCQ
MISS258B	Automotive Sensor and In-Vehicle Networking	1	MCQ
MISS258C	Biomedical Sensors	1	MCQ

MLDE258A	Modeling and Simulation of Antenna Using Simulation Tool	1	Practical	2 Hours
MLDE258B	MATLAB and Simulink	1	Practical	2 Hours
MLDE258C	Python Programming	1	Practical	2 Hours

Electronics

MLEL258A	Refer www.online.vtu.ac.in	1		
MLEL258B	Refer www.online.vtu.ac.in	1		
MLEL258C	Refer www.online.vtu.ac.in	1		
MLEL258D	Refer www.online.vtu.ac.in	1		

Industrial Electronics

MLIE258A	Referwww.online.vtu.ac.in	1		
MLIE258B	Referwww.online.vtu.ac.in	1		
MLIE258C	Referwww.online.vtu.ac.in	1		
MLIE258D	Referwww.online.vtu.ac.in	1		

Signal Processing

MLSP288A	Referwww.online.vtu.ac.in	1		
MLSP288B	Referwww.online.vtu.ac.in	1		
MLSP288C	Referwww.online.vtu.ac.in	1		
MLSP288D	Referwww.online.vtu.ac.in	1		

VLSI Design and Embedded System (Affiliated)

MLEL258A	Referwww.online.vtu.ac.in	1		
MLEL258A	Referwww.online.vtu.ac.in	1		
MLEL258A	Referwww.online.vtu.ac.in	1		
MLEL258A	Referwww.online.vtu.ac.in	1		

Digital Communication Engineering

MLDC258A	Modeling and Simulation of Antenna Using Simulation Tool	1	Practical	2 Hours
MLDC258B	MATLAB and Simulink	1	Practical	2 Hours
MLDC258C	Programming in JAVA	1	Practical	2 Hours
MLDC258D	Python Programming	1	Practical	2 Hours

Electronics & Communication(VLSI Design)

MLEL258A	Referonline.vtu.ac.in/courses	1		
MLEL258B	Referonline.vtu.ac.in/courses	1		
MLEL258C	Referonline.vtu.ac.in/courses	1		
MLEL258D	Referonline.vtu.ac.in/courses	1		

Electronics & Communication(Advanced Communication Technology)

Biomedical Signal Processing and Instrumentation

MLBI288A	Referonline.vtu.ac.in/courses	1		
MLBI288B	Referonline.vtu.ac.in/courses	1		
MLBI288C	Referonline.vtu.ac.in/courses	1		
MLBI288D	Referonline.vtu.ac.in/courses	1		

Iot and Sensor System

MISS258A	Machine Learning	1	MCQ	1 Hour
MISS258B	Automotive Sensor and In-Vehicle Networking	1	MCQ	1 Hour
MISS258C	Biomedical Sensors	1	MCQ	1 Hour

MLDEL258A

MLDEL258B

MLDEL258C

AEC is Online

AEC is Online

AEC is Online

AEC is Online

MLDCL258A

MLDCL258B

MLDCL258C

MLDCL258D

AEC is Online

Only 1st Sem Scheme & Syllabus Available.

AEC is Online

MISS258D	Nano sensors	1	MCQ
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15 **Biomedical Electronics and Industrial Instrumentation (Autonomous) - PG**

16 **Micro Electronics and Control Systems**

MLMS258A	Refer www.online.vtu.ac.in	1	
MLMS258B	Refer www.online.vtu.ac.in	1	
MLMS258C	Refer www.online.vtu.ac.in	1	
MLMS258D	Refer www.online.vtu.ac.in	1	

17 **Electronics & Communication Engg**

MECE258A	Advanced Digital Signal Processing Laboratory	1	Practical
MECE258B	Internet of Things Laboratory	1	Practical
MECE258C	Biomedical Signal Processing	1	MCQ
MECE258D	Array Signal Processing	1	MCQ

Electrical and Electronics Engineering

1 **Power System Engineering**

MEPS258A	Refer www.online.vtu.ac.in	1	
MEPS258B	Refer www.online.vtu.ac.in	1	
MEPS258C	Refer www.online.vtu.ac.in	1	
MEPS258D	Refer www.online.vtu.ac.in	1	

2 **Computer Application In Industrial Drives(Only in Autonomous College)**

3 **Energy System Engineering**

MESE258A	Refer www.online.vtu.ac.in	1	
MESE258B	Refer www.online.vtu.ac.in	1	
MESE258C	Refer www.online.vtu.ac.in	1	
MESE258D	Refer www.online.vtu.ac.in	1	

4 **Electrical Vehicle Technology**

MEVT257A	Refer www.online.vtu.ac.in	1	
MEVT257B	Refer www.online.vtu.ac.in	1	
MEVT257C	Refer www.online.vtu.ac.in	1	
MEVT257D	Refer www.online.vtu.ac.in	1	

5 **Power Electronics**

MEPE258A	Refer www.online.vtu.ac.in	1	
MEPE258B	Refer www.online.vtu.ac.in	1	
MEPE258C	Refer www.online.vtu.ac.in	1	
MEPE258D	Refer www.online.vtu.ac.in	1	

Aeronautical Engineering

1 **Aerospace Propulsion Technology**

MMA258A	Aircraft Systems and Instrumentation	1	MCQ
MMA258B	Aircraft Stability And Control	1	
MMA258C	Android App Development with Kotlin Essentials - (App development Skills)	1	
MMA258D	Employability skill course - (Corporate Skills)	1	

MISS258D	Nano sensors	1	MCQ	1 Hour
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Biomedical Electronics and Industrial Instrumentation (Autonomous) - PG

Micro Electronics and Control Systems

MLMS258A	Refer www.online.vtu.ac.in	1		
MLMS258B	Refer www.online.vtu.ac.in	1		
MLMS258C	Refer www.online.vtu.ac.in	1		
MLMS258D	Refer www.online.vtu.ac.in	1		

Electronics & Communication Engg

MECE258A	Advanced Digital Signal Processing Laboratory	1	Practical	2 Hours
MECE258B	Internet of Things Laboratory	1	Practical	2 Hours
MECE258C	Biomedical Signal Processing	1	MCQ	1 Hours
MECE258D	Array Signal Processing	1	MCQ	1 Hours

Power System Engineering

MEPS258A	Refer www.online.vtu.ac.in	1		
MEPS258B	Refer www.online.vtu.ac.in	1		
MEPS258C	Refer www.online.vtu.ac.in	1		
MEPS258D	Refer www.online.vtu.ac.in	1		

Computer Application In Industrial Drives(Only in Autonomous College)

Energy System Engineering

MESE258A	Refer www.online.vtu.ac.in	1		
MESE258B	Refer www.online.vtu.ac.in	1		
MESE258C	Refer www.online.vtu.ac.in	1		
MESE258D	Refer www.online.vtu.ac.in	1		

Electrical Vehicle Technology

MEVT257A	Refer www.online.vtu.ac.in	1		
MEVT257B	Refer www.online.vtu.ac.in	1		
MEVT257C	Refer www.online.vtu.ac.in	1		
MEVT257D	Refer www.online.vtu.ac.in	1		

Power Electronics

MEPE258A	Refer www.online.vtu.ac.in	1		
MEPE258B	Refer www.online.vtu.ac.in	1		
MEPE258C	Refer www.online.vtu.ac.in	1		
MEPE258D	Refer www.online.vtu.ac.in	1		

Aeronautical Engineering

Aerospace Propulsion Technology

MMA258A	Aircraft Systems and Instrumentation	1	MCQ	1 Hour
MMA258B	Aircraft Stability And Control	1		
MMA258C	Android App Development with Kotlin Essentials - (App development Skills)	1		
MMA258D	Employability skill course - (Corporate Skills)	1		

Only 1st Sem Scheme & Syllabus Available.

AEC is Online

MECEL258A

MECEL258B

AEC is Online

Only 1st sem Scheme & Syllabus Available

AEC is Online

AEC is Online

AEC is Online

Syllabus Missing

5

MECHANICAL ENGINEERING SCIENCES

2 Automotive Engineering

MMAU258A	Automotive Heating, Ventilation and Air Conditioning	1	MCQ
MMAU258B	Battery management system	1	MCQ
MMAU258C	Autonomous Vehicles	1	MCQ
MMAU258D	Drive Cycles of Electric Vehicles	1	MCQ

3 Master of Engineering Management

MMEM258A	Executive Communication	1	Theory
MMEM258B	Legal aspects in Business	1	Theory
MMEM258C	International Business	1	Theory
MMEM258D	Business Etiquettes	1	Theory

4 Product Design & Manufacturing

MMPD258A	PRODUCT ANALYSIS AND COST OPTIMIZATION	1	Theory
MMPD258B	INDUSTRIAL ROBOTICS AND AUTOMATION	1	Theory
MMPD258C	PROJECT MANAGEMENT	1	Theory
MMPD258D	RAPID PROTOTYPING	1	Theory

5 Production Engineering

MMPE258A	Nano Technology	1	MCQ
MMPE258B	Smart Materials	1	MCQ
MMPE258C	Precision Engineering	1	MCQ
MMPE258D	Advanced Processing of Materials	1	MCQ

6 Production Management

MMPM258A	Nano Technology	1	Theory
MMPM258B	Smart Materials	1	Theory
MMPM258C	Precision Engineering	1	Theory
MMPM258D	Advanced Processing of Materials	1	Theory

7 Production Technology

MMPT/MMPY258A	Basics of Rapid Prototyping	1	MCQ
MMPT/MMPY258B	Introduction to Maintenance Engineering	1	MCQ
MMPT/MMPY258C	An Outline of Emerging Technologies	1	MCQ
MMPT/MMPY258D	An over view of Quality Tools	1	MCQ

8 Production Engineering & System Technology

MMPT/MMPY258A	Basics of Rapid Prototyping	1	MCQ
MMPT/MMPY258B	Introduction to Maintenance Engineering	1	MCQ
MMPT/MMPY258C	An Outline of Emerging Technologies	1	MCQ
MMPT/MMPY258D	An over view of Quality Tools	1	MCQ

MECHANICAL ENGINEERING SCIENCES

Automotive Engineering

MMAU258A	Automotive Heating, Ventilation and Air Conditioning	1	MCQ	1 Hour
MMAU258B	Battery management system	1	MCQ	1 Hour
MMAU258C	Autonomous Vehicles	1	MCQ	1 Hour
MMAU258D	Drive Cycles of Electric Vehicles	1	MCQ	1 Hour

Master of Engineering Management

MMEM258A	Executive Communication	1	Theory	2 Hours
MMEM258B	Legal aspects in Business	1	Theory	2 Hours
MMEM258C	International Business	1	Theory	2 Hours
MMEM258D	Business Etiquettes	1	Theory	2 Hours

Product Design & Manufacturing

MMPD258A	PRODUCT ANALYSIS AND COST OPTIMIZATION	1	Theory	2 Hours
MMPD258B	INDUSTRIAL ROBOTICS AND AUTOMATION	1	Theory	2 Hours
MMPD258C	PROJECT MANAGEMENT	1	Theory	2 Hours
MMPD258D	RAPID PROTOTYPING	1	Theory	2 Hours

Production Engineering

MMPE258A	Nano Technology	1	MCQ	1 Hour
MMPE258B	Smart Materials	1	MCQ	1 Hour
MMPE258C	Precision Engineering	1	MCQ	1 Hour
MMPE258D	Advanced Processing of Materials	1	MCQ	1 Hour

Production Management

MMPM258A	Nano Technology	1	Theory	2 Hours
MMPM258B	Smart Materials	1	Theory	2 Hours
MMPM258C	Precision Engineering	1	Theory	2 Hours
MMPM258D	Advanced Processing of Materials	1	Theory	2 Hours

Production Technology

MMPT/MMPY258A	Basics of Rapid Prototyping	1	MCQ	1 Hour
MMPT/MMPY258B	Introduction to Maintenance Engineering	1	MCQ	1 Hour
MMPT/MMPY258C	An Outline of Emerging Technologies	1	MCQ	1 Hour
MMPT/MMPY258D	An over view of Quality Tools	1	MCQ	1 Hour

Production Engineering & System Technology

MMPT/MMPY258A	Basics of Rapid Prototyping	1	MCQ	1 Hour
MMPT/MMPY258B	Introduction to Maintenance Engineering	1	MCQ	1 Hour
MMPT/MMPY258C	An Outline of Emerging Technologies	1	MCQ	1 Hour
MMPT/MMPY258D	An over view of Quality Tools	1	MCQ	1 Hour

9 Manufacturing Science & Engineering

MMSE258A	IOT IN MANUFACTURING	1	Theory
MMSE258B	MICRO MACHINING PROCESSES	1	Theory
MMSE258C	ARTIFICIAL INTELLIGENCE IN MANUFACTURING	1	Theory
MMSE258D	MACHINE LEARNING	1	Theory

10 Computer Aided Engineering

MSCS258	SKILL ENHANCEMENT FOR RESEARCH EXCELLENCE-1	1	
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11 Industrial Automation Engineering

MMIA/MMAR258A	MATLAB for Mechatronics	1	Practical
MMIA/MMAR258B	Basics of Rapid Prototyping	1	MCQ
MMIA/MMAR258C	Environmental Studies and E-Waste Management	1	MCQ
MMIA/MMAR258D	FINITE ELEMENT MODELLING AND ANALYSIS	1	Practical

12 Industrial Automation and Robotics

MMAR/MMIA258A	MAT lab for Mechatronics	1	
MMAR/MMIA258B	Basics of Rapid prototyping	1	
MMAR/MMIA258C	Environmental Studies and E-Waste Management	1	
MMAR/MMIA258D	Finite element Modelling and Analysis	1	

13 Computer Integrated Manufacturing

MMCM258A	An Outline of Emerging Technologies	1	
MMCM258B	Basics of Industrial Safety	1	
MMCM258C	Introduction to Risk Management	1	
MMCM258D	Drive Cycles of Electric Vehicles	1	

14 Design Engineering

MMMD/MMDE258A	Numerical Programming for Mechanical Engineers (Using MATLAB/NumPy)	1	MCQ
MMMD/MMDE258B	Python Programming for Beginners	1	MCQ
MMMD/MMDE258C	Multi-Body Simulation using VTU's CoE Software	1	MCQ
MMMD/MMDE258D	3D Printing and Robotic Simulation Programming	1	MCQ

15 Engineering Analysis & Design

MMEA258A	Basics of Matlab	1	Practical
MMEA258B	Fundamentals On Spreadsheet	1	Practical
MMEA258C	Fundamental of Virtual Reality ARP Development	1	MCQ

Manufacturing Science & Engineering

MMSE258A	IOT IN MANUFACTURING	1	Theory	2 Hours
MMSE258B	MICRO MACHINING PROCESSES	1	Theory	2 Hours
MMSE258C	ARTIFICIAL INTELLIGENCE IN MANUFACTURING	1	Theory	2 Hours
MMSE258D	MACHINE LEARNING	1	Theory	2 Hours

Computer Aided Engineering

MSCS258	SKILL ENHANCEMENT FOR RESEARCH EXCELLENCE-1	1		
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Industrial Automation Engineering

MMIA/MMAR258A	MATLAB for Mechatronics	1	Practical	2 Hours
MMIA/MMAR258B	Basics of Rapid Prototyping	1	MCQ	1 Hour
MMIA/MMAR258C	Environmental Studies and E-Waste Management	1	MCQ	1 Hour
MMIA/MMAR258D	FINITE ELEMENT MODELLING AND ANALYSIS	1	Practical	2 Hours

Industrial Automation and Robotics

MMAR/MMIA258A	MAT lab for Mechatronics	1	Practical	2 Hours
MMAR/MMIA258B	Basics of Rapid prototyping	1	MCQ	1 Hour
MMAR/MMIA258C	Environmental Studies and E-Waste Management	1	MCQ	1 Hour
MMAR/MMIA258D	Finite element Modelling and Analysis	1	Practical	2 Hours

Computer Integrated Manufacturing

MMAR/MMIA258A	MATLAB for Mechatronics	1	Practical	2 Hours
MMAR/MMIA258B	Basics of Rapid Prototyping	1	MCQ	1 Hour
MMAR/MMIA258C	Environmental Studies and E-Waste Management	1	MCQ	1 Hour
MMAR/MMIA258D	FINITE ELEMENT MODELLING AND ANALYSIS	1	Practical	2 Hours

Design Engineering

MMMD/MMDE258A	Numerical Programming for Mechanical Engineers (Using MATLAB/NumPy)	1	MCQ	1 Hour
MMMD/MMDE258B	Python Programming for Beginners	1	MCQ	1 Hour
MMMD/MMDE258C	Multi-Body Simulation using VTU's CoE Software	1	MCQ	1 Hour
MMMD/MMDE258D	3D Printing and Robotic Simulation Programming	1	MCQ	1 Hour

Engineering Analysis & Design

MMEA258A	Basics of Matlab	1	Practical	2 Hours
MMEA258B	Fundamentals On Spreadsheet	1	Practical	2 Hours
MMEA258C	Fundamental of Virtual Reality ARP Development	1	MCQ	1 Hour

Research Excellence

MMIAL/MMARL258A

MMIAL/MMARL258D

MMARL/MMIAL258A

MMARL/MMIAL258D

MMCM258A

MMCM258B

MMCM258C

MMCM258D

MMEAL258A

MMEAL258B

MMEA258D	Introduction Augmented Reality	1	MCQ
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16 Machine Design

MMMD/MMDE258A	Numerical Programming for Mechanical Engineers (Using MATLAB/NumPy)	1	MCQ
MMMD/MMDE258B	Python Programming for Beginners	1	MCQ
MMMD/MMDE258C	Multi-Body Simulation using VTU's CoE Software	1	MCQ
MMMD/MMDE258D	3D Printing and Robotic Simulation Programming	1	MCQ

17 Material Science & Technology

MMST258A	IoT in manufacturing	1	Theory
MMST258B	MICRO MACHINING PROCESSES	1	Theory
MMST258C	ARTIFICIAL INTELLIGENCE IN MANUFACTURING	1	Theory
MMST258D	MACHINE LEARNING	1	Theory

18 Tool Engineering

MMTE258A	Interview Preparation	1	
MMTE258B	Cyber Security	1	
MMTE258C	Ethical hacking	1	
MMTE258D	Innovation and Design Thinking	1	

19 Thermal Power Engineering/Thermal Engineering

MMTP258A	Numerical Programming for Mechanical Engineers (Using MATLAB/NumPy)	1	MCQ
MMTP258B	Python Programming for Beginners	1	MCQ
MMTP258C	3D Printing and Robotic Simulation Programming	1	MCQ
MMTP258D	Numerical Heat Transfer using Spreadsheets	1	Practical

20 Mechatronics

MMTR258A	Fuzzy logic for Robotics	1	MCQ
MMTR258B	Introduction to Smart Factory and Industry 4.0	1	MCQ
MMTR258C	PLC AND SCADA TECHNOLOGY	1	MCQ
MMTR258D	BUSINESS ANALYTICS	1	MCQ

21 Defense Technology

MMDT258A	AI/ML using Python	1	
MMDT258B	MATLAB	1	
MMDT258C	Enhancing Self Competence and Developing Professional Skills	1	

MMEA258D	Introduction Augmented Reality	1	MCQ	1 Hour
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Machine Design

MMMD/MMDE258A	Numerical Programming for Mechanical Engineers (Using MATLAB/NumPy)	1	MCQ	1 Hour
MMMD/MMDE258B	Python Programming for Beginners	1	MCQ	1 Hour
MMMD/MMDE258C	Multi-Body Simulation using VTU's CoE Software	1	MCQ	1 Hour
MMMD/MMDE258D	3D Printing and Robotic Simulation Programming	1	MCQ	1 Hour

Material Science & Technology

MMST258A	IoT in manufacturing	1	Theory	2 Hours
MMST258B	MICRO MACHINING PROCESSES	1	Theory	2 Hours
MMST258C	ARTIFICIAL INTELLIGENCE IN MANUFACTURING	1	Theory	2 Hours
MMST258D	MACHINE LEARNING	1	Theory	2 Hours

Tool Engineering

MMTE258A	Interview Preparation	1		
MMTE258B	Cyber Security	1		
MMTE258C	Ethical hacking	1		
MMTE258D	Innovation and Design Thinking	1		

Thermal Power Engineering/Thermal Engineering

MMTP258A	Numerical Programming for Mechanical Engineers (Using MATLAB/NumPy)	1	MCQ	1 Hour
MMTP258B	Python Programming for Beginners	1	MCQ	1 Hour
MMTP258C	3D Printing and Robotic Simulation Programming	1	MCQ	1 Hour
MMTP258D	Numerical Heat Transfer using Spreadsheets	1	Practical	2 Hours

MMTR258A	Fuzzy logic for Robotics	1	MCQ	1 Hour
MMTR258B	Introduction to Smart Factory and Industry 4.0	1	MCQ	1 Hour
MMTR258C	PLC AND SCADA TECHNOLOGY	1	MCQ	1 Hour
MMTR258D	BUSINESS ANALYTICS	1	MCQ	1 Hour

Defense Technology

NO SYLLABUS

AEC Syllabus is Missing

MMTPL258D

MMDT258D	Ethics, technology and Engineering	1	
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22 Robotics and Mechatronics

MMRM258A	Robotics Ecosystem	1	MCQ
MMRM258B	Robot Programming & Simulation Lab	1	Practical
MMRM258C	Fuzzy logic for Robotics	1	MCQ
MMRM258D	Numerical Programming for Mechanical Engineers (Using MATLAB/NumPy)	1	MCQ

23 Robotics and Artificial Intelligence

MRAI258A	Nano Technology	1	Theory
MRAI258B	Smart Materials	1	Theory
MRAI258C	Precision Engineering	1	Theory
MRAI258D	Advanced Processing of Materials	1	Theory

1

NANOTECHNOLOGY

MNST257A / MINT257A	Technical Writing and Presentation	1	Theory
MNST257B / MINT257B	Problem solving techniques in Science and Engineering	1	Theory

2 Nano Science & Technology (Uni Dept)

MNST257A / MINT257A	Technical Writing and Presentation	1	Theory
MNST257B / MINT257B	Problem solving techniques in Science and Engineering	1	Theory

1

TEXTILE TECHNOLOGY

MJTT258A	Developments in Fabric Formation	1	Theory
MJTT258B	Biotechnology Applications in Textile Industry	1	Theory
MJTT258C	Medical Textiles	1	Theory
MJTT258D	Human Resource Management	1	Theory

1 Master of Computer Application (MCA)

Ability Enhancement Courses with Seminar-I

Mandatory Course (NCMC), Students have to select the Topic like ERP, R

2 M.Sc. in Chemistry

MSC257 (AEC / AUD)	Research Methodology and IPR	PP
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Robotics and Mechatronics

MMRM258A	Robotics Ecosystem	1	MCQ	1 Hour
MMRM258B	Robot Programming & Simulation Lab	1	Practical	2 Hours
MMRM258C	Fuzzy logic for Robotics	1	MCQ	1 Hour
MMRM258D	Numerical Programming for Mechanical Engineers (Using MATLAB/NumPy)	1	MCQ	1 Hour

MMRML258B

Robotics and Artificial Intelligence

MRAI258A	Nano Technology	1	Theory	2 Hours
MRAI258B	Smart Materials	1	Theory	2 Hours
MRAI258C	Precision Engineering	1	Theory	2 Hours
MRAI258D	Advanced Processing of Materials	1	Theory	2 Hours

NANOTECHNOLOGY

MNST257A / MINT257A	Technical Writing and Presentation	1	Theory	2 Hours
MNST257B / MINT257B	Problem solving techniques in Science and Engineering	1	Theory	2 Hours

Nano Science & Technology (Uni Dept)

MNST257A / MINT257A	Technical Writing and Presentation	1	Theory	2 Hours
MNST257B / MINT257B	Problem solving techniques in Science and Engineering	1	Theory	2 Hours

TEXTILE TECHNOLOGY

MJTT258A	Developments in Fabric Formation	1	Theory	2 Hours
MJTT258B	Biotechnology Applications in Textile Industry	1	Theory	2 Hours
MJTT258C	Medical Textiles	1	Theory	2 Hours
MJTT258D	Human Resource Management	1	Theory	2 Hours

Master of Computer Application (MCA)

NO SYLLABUS OF

Ability Enhancement Courses with Seminar-I

M.Sc. in Chemistry

MSC257 (AEC / AUD)	Research Methodology and IPR	PP	NO SYLLABUS
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