



## ವಿಶ್ವವಿದ್ಯಾರಣ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

(ವಿ.ಟಿ.ಯು. ಅಧಿನಿಯಮ ೧೯೯೪ ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)

### Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the VTU Act, 1994)

"Jnana Sangama" Belagavi-590018, Karnataka, India



**Dr. Prasad B. Rampure, M.E., Ph.D.**  
**Registrar**

Phone : (0831) 2405468

Fax : (0831) 2405467

Ref No: VTU/MYS/VTU-COE/HMCS/2025-26/110

**03 MAR 2026**

### CIRCULAR

**Subject:** Extension for Registration for - Professional Elective Courses (PEC) and Open Elective Courses (OEC) VIII semester of schemes 2022 (UG Engineering Program).

The registrations for Professional Elective Courses (PEC) and Open Elective Courses (OEC) have been extended till **10-03-2026**. This notification for Registration applies to students with USN XXX22XXXXX (Regular), USN XXX23XX4XX (Diploma Lateral Entry) and USN XXX23XX6XX (B.Sc. Lateral Entry).

The students have to register online through <https://online.vtu.ac.in>. The procedure for registration is attached with the circular and also has uploaded in the portal <https://online.vtu.ac.in>

All the Principals of Engineering Colleges are hereby informed to bring the content of this circular to the notice of all the students, Department Head's and faculties.

- Note:**
1. Regarding the Fee payment a separate circular will be sent in the upcoming days.
  2. Further extension will not be given.
  3. If the students failed to register in the given last date, it will be considered as arrears.
  4. Students who have registered in the old portal must do new registration in the new portal.
  5. Course enrollment will start from 03-03-2026.

For any further clarification regarding the registration process, reach out to VTU COE through [vtucoe.online@gmail.com](mailto:vtucoe.online@gmail.com) or [onlineprograms@gmail.com](mailto:onlineprograms@gmail.com).

By Order,

*Rampure* / 03/03/26

Registrar

*[Signature]*

- Enclosures:**
1. Upgradation of VTU-COE Portal and Guidelines for Online PEC/OEC Registration & Course Enrollment (8th Semester)
  2. Course List for the Online PEC/OEC Registration & Course Enrollment (8th Semester)
  3. Guidelines for selection of PEC and OEC Courses

**To,**

1. The Principals of all Affiliated/ Constituent/ Autonomous Engineering colleges and Centre for PG studies, VTU

**Copy to:**

1. To The Hon,ble Vice-Chancellor through the secretary to VC , VTU, Belagavi for kind information.
2. The Registrar (Evaluation), VTU, Belagavi for kind information.
3. The Regional Directors (I/c) of all the regional offices for information.
4. The Director ITI SMU, VTU Belagavi for information and to make arrangements to upload on the VTU portal.
5. Special Officer, VTU Centre for Online Education Mysuru.
6. Office Copy.

**Subject: Upgradation of VTU-COE Portal and Guidelines for Online PEC/OEC Registration & Course Enrollment (8th Semester)**

---

This is to inform all students and faculty members that the **VTU-COE Portal** has been upgraded to a new version.

With this upgrade:

1. When students visit **<https://online.vtu.ac.in/>**, they will automatically be redirected to the **new version** of the portal.
2. Students who wish to access the **older version** may do so by:
  - Visiting: **<https://online.vtu.ac.in/v1/>**, or
  - Clicking on the **“Go to Older Version”** button available on the homepage of the new portal.
3. Students are hereby informed that **accounts from the older version have NOT been automatically migrated to the new version.**
  - Students will **not be able to log in to the new version using the login credentials of the older version.**
  - They must independently **create a new account in the upgraded portal** to access services in the new version.

However, the following points must be strictly noted:

- Creation of **new accounts** and **enrollment for new courses/programs** are disabled in the older version.
- Only students who already:
  - Have an account in the older version, and
  - Have enrolled in courses/programs in the older version may continue their ongoing courses in the older portal. (This provision shall NOT apply to students opting for Online PEC/OEC in 8th Semester. Such students must compulsorily create an account, complete PEC/OEC registration, and enroll for courses in the NEW version of the portal only.)
- Students who do not have an account in the older version or who wish to enroll in new courses/programs must create their account in the **new version** and continue their academic activities there.

---

# Instructions for 8th Semester Students Opting Online PEC/OEC

Students belonging to the following USN format:  
**[Insert USN Format Here]**

who are opting for **Online PEC/OEC courses in 8th Semester**, must strictly comply with the following instructions:

1. They must **create their account in the new version** of the VTU-COE portal.
2. They must complete **PEC/OEC registration (application)** in the new version of the VTU-COE portal.
3. After successful PEC/OEC registration, they must **enroll in the selected course(s)** in the new version of the VTU-COE portal.
4. Even if a student has already applied or enrolled in the older version, they must **compulsorily register and enroll again in the new version** of the VTU-COE portal.
5. Once a student submits the **PEC/OEC registration (application)**, **no further changes or edits will be permitted to the selected course(s) under any circumstances**. Students are therefore advised to carefully verify the course selection before final submission.

## Important Clarifications

- **Last Date for PEC/OEC Registration:** [Insert Date]
- **Last Date for Course Enrollment:** [Insert Date]
- At present, students are required to:
  - Complete PEC/OEC registration.
  - Enroll in the approved course(s).
  - Start learning and complete the lessons/modules.
- Instructions regarding **quizzes, internal assessments, and examination enrollment** will be announced separately by the University.
- Students are strictly instructed **NOT to register or make any payment for examinations** on the portal at this stage.

- Any student who directly enrolls in a course **without completing PEC/OEC registration (application)** will **NOT be considered under PEC/OEC**, and such enrollment will not be validated for academic credit.

The **list of eligible PEC/OEC courses** and the **step-by-step procedure for account creation, PEC/OEC registration, and course enrollment** are attached along with this circular.

## CIVIL ENGINEERING

Sl. No	Course Name	Weeks	Credits	Course Link
1	Finite Element Method And Computational Structural Dynamics	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-finite-element-method-and-computational-structural-dynamics">https://online.vtu.ac.in/course/1-finite-element-method-and-computational-structural-dynamics</a>
2	Mechanics Of Materials	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-mechanics-of-materials">https://online.vtu.ac.in/course/1-mechanics-of-materials</a>
3	Municipal Solid Waste Management	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-municipal-solid-waste-management">https://online.vtu.ac.in/course/1-municipal-solid-waste-management</a>
4	Introduction to Multimodal Urban Transportation Systems (MUTS)	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-introduction-to-multimodal-urban-transportation-systems-muts">https://online.vtu.ac.in/course/1-introduction-to-multimodal-urban-transportation-systems-muts</a>
5	Bridge Engineering	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-bridge-engineering">https://online.vtu.ac.in/course/1-bridge-engineering</a>
6	Wastewater Treatment And Recycling	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-wastewater-treatment-and-recycling">https://online.vtu.ac.in/course/1-wastewater-treatment-and-recycling</a>
7	Integrated Waste Management For A Smart City	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-integrated-waste-management-for-a-smart-city">https://online.vtu.ac.in/course/1-integrated-waste-management-for-a-smart-city</a>
8	Sustainable Transportation Systems	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-sustainable-transportation-systems">https://online.vtu.ac.in/course/1-sustainable-transportation-systems</a>
9	Advanced Foundation Engineering	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-advanced-foundation-engineering">https://online.vtu.ac.in/course/1-advanced-foundation-engineering</a>
10	Applied Seismology for Engineers	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-applied-seismology-for-engineers">https://online.vtu.ac.in/course/1-applied-seismology-for-engineers</a>
11	Environmental Remediation of Contaminated Sites	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-environmental-remediation-of-contaminated-sites">https://online.vtu.ac.in/course/1-environmental-remediation-of-contaminated-sites</a>
12	Geology and Soil Mechanics	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-geology-and-soil-mechanics">https://online.vtu.ac.in/course/1-geology-and-soil-mechanics</a>

13	Hydraulic Engineering	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-hydraulic-engineering">https://online.vtu.ac.in/course/1-hydraulic-engineering</a>
14	Industrial Wastewater Treatment	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-industrial-wastewater-treatment">https://online.vtu.ac.in/course/1-industrial-wastewater-treatment</a>
15	Maintenance and Repair of Concrete Structures	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-maintenance-and-repair-of-concrete-structures">https://online.vtu.ac.in/course/1-maintenance-and-repair-of-concrete-structures</a>
16	Modern Construction Materials	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-modern-construction-materials">https://online.vtu.ac.in/course/1-modern-construction-materials</a>
17	Soil Structure Interaction	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-soil-structure-interaction">https://online.vtu.ac.in/course/1-soil-structure-interaction</a>
18	Unsaturated Soil Mechanics	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-unsaturated-soil-mechanics">https://online.vtu.ac.in/course/1-unsaturated-soil-mechanics</a>
19	Geosynthetics And Reinforced Soil Structures	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-geosynthetics-and-reinforced-soil-structures">https://online.vtu.ac.in/course/1-geosynthetics-and-reinforced-soil-structures</a>
20	Ground Improvement	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-ground-improvement">https://online.vtu.ac.in/course/1-ground-improvement</a>
21	Pavement Materials (Under Pavement Engineering)	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-pavement-materials-under-pavement-engineering">https://online.vtu.ac.in/course/1-pavement-materials-under-pavement-engineering</a>
22	Environmental Geomechanics	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-environmental-geomechanics">https://online.vtu.ac.in/course/1-environmental-geomechanics</a>
23	Analysis and Design of Bituminous Pavements	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-analysis-and-design-of-bituminous-pavements">https://online.vtu.ac.in/course/1-analysis-and-design-of-bituminous-pavements</a>
24	Project Planning & Control	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-project-planning-control">https://online.vtu.ac.in/course/1-project-planning-control</a>
25	Principles Of Construction Management	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-principles-of-construction-management">https://online.vtu.ac.in/course/1-principles-of-construction-management</a>

26	Matrix Method Of Structural Analysis	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-matrix-method-of-structural-analysis">https://online.vtu.ac.in/course/1-matrix-method-of-structural-analysis</a>
27	Sustainable Engineering Concepts And Life Cycle Analysis	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-sustainable-engineering-concepts-and-life-cycle-analysis">https://online.vtu.ac.in/course/1-sustainable-engineering-concepts-and-life-cycle-analysis</a>
28	Digital Land Surveying and Mapping (DLS&M)	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-digital-land-surveying-and-mapping-dlsm">https://online.vtu.ac.in/course/1-digital-land-surveying-and-mapping-dlsm</a>
29	Earthquake Resistant Design of Foundations	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-earthquake-resistant-design-of-foundations">https://online.vtu.ac.in/course/1-earthquake-resistant-design-of-foundations</a>
30	Expansive Soil	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-expansive-soil">https://online.vtu.ac.in/course/1-expansive-soil</a>
31	Geomorphic Processes: Landforms and Landscapes	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-geomorphic-processes-landforms-and-landscapes">https://online.vtu.ac.in/course/1-geomorphic-processes-landforms-and-landscapes</a>
32	Introduction to Accounting and Finance for Civil Engineers	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-introduction-to-accounting-and-finance-for-civil-engineers">https://online.vtu.ac.in/course/1-introduction-to-accounting-and-finance-for-civil-engineers</a>
33	Introduction to Civil Engineering Profession	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-introduction-to-civil-engineering-profession">https://online.vtu.ac.in/course/1-introduction-to-civil-engineering-profession</a>
34	Subsurface Exploration : Importance And Techniques Involved	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-subsurface-exploration-importance-and-techniques-involved">https://online.vtu.ac.in/course/1-subsurface-exploration-importance-and-techniques-involved</a>
35	Plastic Waste Management	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-plastic-waste-management">https://online.vtu.ac.in/course/1-plastic-waste-management</a>
36	GPS Surveying	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-gps-surveying">https://online.vtu.ac.in/course/1-gps-surveying</a>
37	Structural Dynamics for Civil Engineers - SDOF Systems	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-structural-dynamics-for-civil-engineers-sdof-systems">https://online.vtu.ac.in/course/1-structural-dynamics-for-civil-engineers-sdof-systems</a>

## AEROSPACE ENGINEERING

Sl. No	Course Name	Weeks	Credits	Course Link
1	Aircraft Design	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-aircraft-design">https://online.vtu.ac.in/course/1-aircraft-design</a>
2	Fundamentals of Supersonic and Hypersonic Flow	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-fundamentals-of-supersonic-and-hypersonic-flow">https://online.vtu.ac.in/course/1-fundamentals-of-supersonic-and-hypersonic-flow</a>
3	Introduction to Aircraft Control System	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-introduction-to-aircraft-control-system">https://online.vtu.ac.in/course/1-introduction-to-aircraft-control-system</a>
4	Introduction to Ancient Indian Technology	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-introduction-to-ancient-indian-technology">https://online.vtu.ac.in/course/1-introduction-to-ancient-indian-technology</a>
5	Introduction to Experiments in Flight	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-introduction-to-experiments-in-flight">https://online.vtu.ac.in/course/1-introduction-to-experiments-in-flight</a>
6	Introduction to Launch Vehicle Analysis and Design	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-introduction-to-launch-vehicle-analysis-and-design">https://online.vtu.ac.in/course/1-introduction-to-launch-vehicle-analysis-and-design</a>
7	Computational Science in Engineering	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-computational-science-in-engineering">https://online.vtu.ac.in/course/1-computational-science-in-engineering</a>
8	Lighter than Air Systems	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-lighter-than-air-systems">https://online.vtu.ac.in/course/1-lighter-than-air-systems</a>
9	Combustion of Solid Fuels and Propellants	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-combustion-of-solid-fuels-and-propellants">https://online.vtu.ac.in/course/1-combustion-of-solid-fuels-and-propellants</a>
10	Wind Energy	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-wind-energy">https://online.vtu.ac.in/course/1-wind-energy</a>

## COMPUTER SCIENCE ENGINEERING

Sl. No	Course Name	Weeks	Credits	Course Link
1.	Circuit Complexity Theory	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-circuit-complexity-theory">https://online.vtu.ac.in/course/1-circuit-complexity-theory</a>
2.	Computational Number Theory and Algebra	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-computational-number-theory-and-algebra">https://online.vtu.ac.in/course/1-computational-number-theory-and-algebra</a>
3.	Parallel Computer Architecture	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-parallel-computer-architecture">https://online.vtu.ac.in/course/1-parallel-computer-architecture</a>
4.	Quantum Algorithms and Cryptography	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-quantum-algorithms-and-cryptography">https://online.vtu.ac.in/course/1-quantum-algorithms-and-cryptography</a>
5.	Switching Circuits and Logic Design	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-switching-circuits-and-logic-design">https://online.vtu.ac.in/course/1-switching-circuits-and-logic-design</a>
6.	Affective Computing	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-affective-computing">https://online.vtu.ac.in/course/1-affective-computing</a>
7.	Foundations of Cyber Physical Systems	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-foundations-of-cyber-physical-systems">https://online.vtu.ac.in/course/1-foundations-of-cyber-physical-systems</a>
8.	GPU Architectures and Programming	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-gpu-architectures-and-programming">https://online.vtu.ac.in/course/1-gpu-architectures-and-programming</a>
9.	Reinforcement Learning	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-reinforcement-learning">https://online.vtu.ac.in/course/1-reinforcement-learning</a>
10.	Secure Computation: Part I	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-secure-computation-part-i">https://online.vtu.ac.in/course/1-secure-computation-part-i</a>
11.	Social Networks	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-social-networks">https://online.vtu.ac.in/course/1-social-networks</a>
12.	Introduction To Industry 4.0 And Industrial Internet of Things	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-introduction-to-industry-40-and-industrial-internet-of-things">https://online.vtu.ac.in/course/1-introduction-to-industry-40-and-industrial-internet-of-things</a>
13.	Reinforcement Learning	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-reinforcement">https://online.vtu.ac.in/course/1-reinforcement</a>

				<a href="#">learning</a>
14.	Parameterized Algorithms	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-parameterized-algorithms">https://online.vtu.ac.in/course/1-parameterized-algorithms</a>
15.	Applied Accelerated Artificial Intelligence	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-applied-accelerated-artificial-intelligence">https://online.vtu.ac.in/course/1-applied-accelerated-artificial-intelligence</a>
16.	Social Networks	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-social-networks">https://online.vtu.ac.in/course/1-social-networks</a>
17.	Computational Complexity	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-computational-complexity">https://online.vtu.ac.in/course/1-computational-complexity</a>
18.	Introduction To Game Theory And Mechanism Design	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-introduction-to-game-theory-and-mechanism-design">https://online.vtu.ac.in/course/1-introduction-to-game-theory-and-mechanism-design</a>
19.	Advanced Distributed System	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-advanced-distributed-system">https://online.vtu.ac.in/course/1-advanced-distributed-system</a>
20.	Privacy And Security in online Social Media	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-privacy-and-security-in-online-social-media">https://online.vtu.ac.in/course/1-privacy-and-security-in-online-social-media</a>
21.	Ethical Hacking	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-ethical-hacking">https://online.vtu.ac.in/course/1-ethical-hacking</a>
22.	Introduction To Haskell Programming	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-introduction-to-haskell-programming">https://online.vtu.ac.in/course/1-introduction-to-haskell-programming</a>
23.	Data Science for Engineers	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-data-science-for-engineers">https://online.vtu.ac.in/course/1-data-science-for-engineers</a>
24.	Google Cloud Computing Foundations	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-google-cloud-computing-foundations">https://online.vtu.ac.in/course/1-google-cloud-computing-foundations</a>
25.	Edge Computing	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-edge-computing">https://online.vtu.ac.in/course/1-edge-computing</a>
26.	Embedded System Design With ARM	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-embedded-system-design-with-arm">https://online.vtu.ac.in/course/1-embedded-system-design-with-arm</a>
27.	Optimisation for Machine Learning: Theory and Implementation(Hindi)	8 Weeks	2	Link will be updated soon / Search by the Course Name

28.	User-centric Computing For Human-Computer Interaction	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-user-centric-computing-for-human-computer-interaction">https://online.vtu.ac.in/course/1-user-centric-computing-for-human-computer-interaction</a>
29.	AI: Constraint Satisfaction	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-ai-constraint-satisfaction">https://online.vtu.ac.in/course/1-ai-constraint-satisfaction</a>
30.	Introduction To Soft Computing	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-introduction-to-soft-computing">https://online.vtu.ac.in/course/1-introduction-to-soft-computing</a>
31.	Foundation of Cloud Iot Edge ML	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-foundation-of-cloud-iot-edge-ml">https://online.vtu.ac.in/course/1-foundation-of-cloud-iot-edge-ml</a>
32.	Hardware Modeling Using Verilog	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-hardware-modeling-using-verilog">https://online.vtu.ac.in/course/1-hardware-modeling-using-verilog</a>
33.	Machine Learning for earth system Sciences	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-machine-learning-for-earth-system-sciences">https://online.vtu.ac.in/course/1-machine-learning-for-earth-system-sciences</a>
34.	Software Testing (IITKGP)	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-software-testing-iitkgp">https://online.vtu.ac.in/course/1-software-testing-iitkgp</a>
35.	Systems and Usable Security	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-systems-and-usable-security">https://online.vtu.ac.in/course/1-systems-and-usable-security</a>

## TEXTILE ENGINEERING

Sl. No	Course Name	Weeks	Credits	Course Link
1.	Textile Finishing	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-textile-finishing">https://online.vtu.ac.in/course/1-textile-finishing</a>
2.	Science And Technology Of Weft And Warp Knitting	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-science-and-technology-of-weft-and-warp-knitting">https://online.vtu.ac.in/course/1-science-and-technology-of-weft-and-warp-knitting</a>
3.	Textured Yarn Technology	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-textured-yarn-technology">https://online.vtu.ac.in/course/1-textured-yarn-technology</a>
4.	Testing of Functional and Technical Textiles	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-testing-of-functional-and-technical-textiles">https://online.vtu.ac.in/course/1-testing-of-functional-and-technical-textiles</a>
5.	Advanced Textile Printing Technology	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-advanced-textile-printing-technology">https://online.vtu.ac.in/course/1-advanced-textile-printing-technology</a>
6.	New Spinning Technologies	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-new-spinning-technologies">https://online.vtu.ac.in/course/1-new-spinning-technologies</a>
7.	Textile Product Design and Development	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-textile-product-design-and-development">https://online.vtu.ac.in/course/1-textile-product-design-and-development</a>
8.	Technical Textiles	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-technical-textiles">https://online.vtu.ac.in/course/1-technical-textiles</a>
9.	Principles of Combing ,Roving Preparation & Ring Spinning	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-principles-of-combing-roving-preparation-ring-spinning">https://online.vtu.ac.in/course/1-principles-of-combing-roving-preparation-ring-spinning</a>
10.	Theory of Yarn Structure	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-theory-of-yarn-structure">https://online.vtu.ac.in/course/1-theory-of-yarn-structure</a>
11.	Science of Clothing Comfort	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-science-of-clothing-comfort">https://online.vtu.ac.in/course/1-science-of-clothing-comfort</a>

## BIOTECHNOLOGY AND BIOENGINEERING

Sl. No	Course Name	Weeks	Credits	Course Link
1	Medical Image Analysis	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-medical-image-analysis">https://online.vtu.ac.in/course/1-medical-image-analysis</a>
2	Introduction To Biomedical Imaging Systems	12 Weeks	3	Link will be updated soon / Search by the Course Name
3	Genome Editing And Engineering	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-genome-editing-and-engineering">https://online.vtu.ac.in/course/1-genome-editing-and-engineering</a>
4	Conservation Geography	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-conservation-geography">https://online.vtu.ac.in/course/1-conservation-geography</a>
5	Experimental Biotechnology	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-experimental-biotechnology">https://online.vtu.ac.in/course/1-experimental-biotechnology</a>
6	Industrial Biotechnology	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-industrial-biotechnology">https://online.vtu.ac.in/course/1-industrial-biotechnology</a>
7	Environmental Chemistry and Microbiology	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-environmental-chemistry-and-microbiology">https://online.vtu.ac.in/course/1-environmental-chemistry-and-microbiology</a>
8	Maternal Infant Young Child Nutrition	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-maternal-infant-young-child-nutrition">https://online.vtu.ac.in/course/1-maternal-infant-young-child-nutrition</a>
9	Thermodynamics for Biological Systems : Classical and Statistical Aspect	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-thermodynamics-for-biological-systems-classical-and-statistical-aspect">https://online.vtu.ac.in/course/1-thermodynamics-for-biological-systems-classical-and-statistical-aspect</a>
10	Maternal Infant Young Child Nutrition	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-maternal-infant-young-child-nutrition">https://online.vtu.ac.in/course/1-maternal-infant-young-child-nutrition</a>
11	RNA Biology	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-rna-biology">https://online.vtu.ac.in/course/1-rna-biology</a>
12	Biomechanics	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-biomechanics">https://online.vtu.ac.in/course/1-biomechanics</a>
13	Bio Informatics: Algorithms and	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-bio-informatics">https://online.vtu.ac.in/course/1-bio-informatics</a>

	Applications			<a href="#">algorithms-and-applications</a>
14	Computational Systems Biology	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-computational-systems-biology">https://online.vtu.ac.in/course/1-computational-systems-biology</a>
15	Conservation Economics	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-conservation-economics">https://online.vtu.ac.in/course/1-conservation-economics</a>
16	Host-Pathogen Interaction (Immunology)	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-host-pathogen-interaction-immunology">https://online.vtu.ac.in/course/1-host-pathogen-interaction-immunology</a>
17	Interactomics : Basics & Applications	12 Weeks	3	Link will be updated soon / Search by the Course Name
18	Optical Spectroscopy and Microscopy : Fundamentals of optical measurements and instrumentation	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-optical-spectroscopy-and-microscopy-fundamentals-of-optical-measurements-and-instrumentation">https://online.vtu.ac.in/course/1-optical-spectroscopy-and-microscopy-fundamentals-of-optical-measurements-and-instrumentation</a>
19	Modern Food Packaging Technologies: Regulatory Aspects and Global Trends	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-modern-food-packaging-technologies-regulatory-aspects-and-global-trends">https://online.vtu.ac.in/course/1-modern-food-packaging-technologies-regulatory-aspects-and-global-trends</a>
20	Novel Technologies For Food Processing And Shelf Life Extension	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-novel-technologies-for-food-processing-and-shelf-life-extension">https://online.vtu.ac.in/course/1-novel-technologies-for-food-processing-and-shelf-life-extension</a>
21	Cooling Technology: Why and How utilized in Food Processing and allied Industries	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-cooling-technology-why-and-how-utilized-in-food-processing-and-allied-industries">https://online.vtu.ac.in/course/1-cooling-technology-why-and-how-utilized-in-food-processing-and-allied-industries</a>
22	Introductory Mathematical Methods for Biologists	<b>8 Weeks</b>	<b>2</b>	<a href="https://online.vtu.ac.in/course/1-introductory-mathematical-methods-for-biologists">https://online.vtu.ac.in/course/1-introductory-mathematical-methods-for-biologists</a>
23	Medical Biomaterials	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-medical-biomaterials">https://online.vtu.ac.in/course/1-medical-biomaterials</a>
24	Nanotechnology in Agriculture	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-nanotechnology-in-agriculture">https://online.vtu.ac.in/course/1-nanotechnology-in-agriculture</a>

25	Organ Printing	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-organ-printing">https://online.vtu.ac.in/course/1-organ-printing</a>
26	Introduction To Mechanobiology	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-introduction-to-mechanobiology">https://online.vtu.ac.in/course/1-introduction-to-mechanobiology</a>
27	Bioengineering: An Interface with Biology and Medicine	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-bioengineering-an-interface-with-biology-and-medicine">https://online.vtu.ac.in/course/1-bioengineering-an-interface-with-biology-and-medicine</a>
28	Biostatistics and Design of experiments	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-biostatistics-and-design-of-experiments">https://online.vtu.ac.in/course/1-biostatistics-and-design-of-experiments</a>
29	Data Analysis for Biologists	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-data-analysis-for-biologists">https://online.vtu.ac.in/course/1-data-analysis-for-biologists</a>
30	Computer Aided Drug Design	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-computer-aided-drug-design">https://online.vtu.ac.in/course/1-computer-aided-drug-design</a>
31	Cellular Biophysics: A Framework For Quantitative Biology	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-cellular-biophysics-a-framework-for-quantitative-biology">https://online.vtu.ac.in/course/1-cellular-biophysics-a-framework-for-quantitative-biology</a>
32	Plant Cell Bioprocessing	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-plant-cell-bioprocessing">https://online.vtu.ac.in/course/1-plant-cell-bioprocessing</a>
33	Data Analysis For Biologists	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-data-analysis-for-biologists">https://online.vtu.ac.in/course/1-data-analysis-for-biologists</a>
34	Biointerface Engineering	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-biointerface-engineering">https://online.vtu.ac.in/course/1-biointerface-engineering</a>
35	Demystifying The Brain	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-demystifying-the-brain">https://online.vtu.ac.in/course/1-demystifying-the-brain</a>

## MANAGEMENT

Sl. No	Course Name	Weeks	Credits	Course Link
1	Strategy And Technology: A Practical Primer	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-strategy-and-technology-a-practical-primer">https://online.vtu.ac.in/course/1-strategy-and-technology-a-practical-primer</a>
2	Strategic Management For Competitive Advantage	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-strategic-management-for-competitive-advantage">https://online.vtu.ac.in/course/1-strategic-management-for-competitive-advantage</a>
3	Industrial Safety Engineering	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-industrial-safety-engineering">https://online.vtu.ac.in/course/1-industrial-safety-engineering</a>
4	Entrepreneurship	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-entrepreneurship">https://online.vtu.ac.in/course/1-entrepreneurship</a>
5	Automation In Production Systems And Management	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-automation-in-production-systems-and-management">https://online.vtu.ac.in/course/1-automation-in-production-systems-and-management</a>
6	Toyota Production System	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-toyota-production-system">https://online.vtu.ac.in/course/1-toyota-production-system</a>
7	Yoga And Positive Psychology For Managing Career And Life	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-yoga-and-positive-psychology-for-managing-career-and-life">https://online.vtu.ac.in/course/1-yoga-and-positive-psychology-for-managing-career-and-life</a>
8	Marketing Management - I	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-marketing-management-i">https://online.vtu.ac.in/course/1-marketing-management-i</a>
9	Game Theory	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-game-theory">https://online.vtu.ac.in/course/1-game-theory</a>
10	Managing change in organizations	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-managing-change-in-organizations">https://online.vtu.ac.in/course/1-managing-change-in-organizations</a>
11	Simulation of Business Systems: An Applied Approach	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-simulation-of-business-systems-an-applied-approach">https://online.vtu.ac.in/course/1-simulation-of-business-systems-an-applied-approach</a>
12	Systems Engineering: Theory & Practice	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-systems-engineering-theory-practice">https://online.vtu.ac.in/course/1-systems-engineering-theory-practice</a>
13	Business Forecasting	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-business-forecasting">https://online.vtu.ac.in/course/1-business-forecasting</a>
14	Design Thinking - A Primer	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-design-thinking-a-primer">https://online.vtu.ac.in/course/1-design-thinking-a-primer</a>

## ELECTRONICS AND COMMUNICATION ENGINEERING

Sl. No	Course Name	Weeks	Credits	Course Link
1	Artificial Intelligence : Search Methods for Problem Solving, IIT Madras	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-artificial-intelligence-search-methods-for-problem-solving-iit-madras">https://online.vtu.ac.in/course/1-artificial-intelligence-search-methods-for-problem-solving-iit-madras</a>
2	Understanding Incubation and Enterprenurship Prof. B K Chakravarthy	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-understanding-incubation-and-entrepreneurship-prof-b-k-chakravarthy">https://online.vtu.ac.in/course/1-understanding-incubation-and-entrepreneurship-prof-b-k-chakravarthy</a>
3	Learning Anlystics Tools Prof. Rajkumar Rajendram	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-learning-analytics-tools-prof-rajkumar-rajendran">https://online.vtu.ac.in/course/1-learning-analytics-tools-prof-rajkumar-rajendran</a>
4	Modern Digital Communication Techniques	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-modern-digital-communication-techniques">https://online.vtu.ac.in/course/1-modern-digital-communication-techniques</a>
5	Applied Linear Algebra For Signal Processing, Data Analytics And Machine Learning	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-applied-linear-algebra-for-signal-processing-data-analytics-and-machine-learning">https://online.vtu.ac.in/course/1-applied-linear-algebra-for-signal-processing-data-analytics-and-machine-learning</a>
6	Stochastic Control And Communication	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-stochastic-control-and-communication">https://online.vtu.ac.in/course/1-stochastic-control-and-communication</a>
7	Principles And Techniques Of Modern Radar Systems	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-principles-and-techniques-of-modern-radar-systems">https://online.vtu.ac.in/course/1-principles-and-techniques-of-modern-radar-systems</a>
8	Fiber Optic Communication Technology	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-fiber-optic-communication-technology">https://online.vtu.ac.in/course/1-fiber-optic-communication-technology</a>
9	Probability Foundations For Electrical Engineers	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-probability-foundations-for-electrical-engineers">https://online.vtu.ac.in/course/1-probability-foundations-for-electrical-engineers</a>
10	Mathematical Aspects Of Biomedical Electronic System Design	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-mathematical-aspects-of-biomedical-electronic-system-design">https://online.vtu.ac.in/course/1-mathematical-aspects-of-biomedical-electronic-system-design</a>

11	Applied Optimization For Wireless, Machine Learning, Big Data	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-applied-optimization-for-wireless-machine-learning-big-data">https://online.vtu.ac.in/course/1-applied-optimization-for-wireless-machine-learning-big-data</a>
12	Microelectronics: Devices To Circuits	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-microelectronics-devices-to-circuits">https://online.vtu.ac.in/course/1-microelectronics-devices-to-circuits</a>
13	Photonic integrated circuit	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-photonic-integrated-circuit">https://online.vtu.ac.in/course/1-photonic-integrated-circuit</a>
14	Analog Ic Design	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-analog-ic-design">https://online.vtu.ac.in/course/1-analog-ic-design</a>
15	Computer Vision And Image Processing - Fundamentals And Applications	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-computer-vision-and-image-processing-fundamentals-and-applications">https://online.vtu.ac.in/course/1-computer-vision-and-image-processing-fundamentals-and-applications</a>
16	Physics of Nanoscale Devices	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-physics-of-nanoscale-devices">https://online.vtu.ac.in/course/1-physics-of-nanoscale-devices</a>
17	Power Management Integrated Circuits	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-power-management-integrated-circuits">https://online.vtu.ac.in/course/1-power-management-integrated-circuits</a>
18	Semiconductor device modeling and Simulation	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-semiconductor-device-modeling-and-simulation">https://online.vtu.ac.in/course/1-semiconductor-device-modeling-and-simulation</a>
19	Advanced Computer Networks	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-advanced-computer-networks">https://online.vtu.ac.in/course/1-advanced-computer-networks</a>
20	Parallel Computer Architecture	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-parallel-computer-architecture">https://online.vtu.ac.in/course/1-parallel-computer-architecture</a>
21	Data Analytics with Python	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-data-analytics-with-python">https://online.vtu.ac.in/course/1-data-analytics-with-python</a>
22	Programming In Java	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-programming-in-java">https://online.vtu.ac.in/course/1-programming-in-java</a>
23	Data Structure And Algorithms Using Java	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-data-structure-and-algorithms-using-java">https://online.vtu.ac.in/course/1-data-structure-and-algorithms-using-java</a>

24	Fuzzy Sets, Logic and Systems & Applications	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-fuzzy-sets-logic-and-systems-applications">https://online.vtu.ac.in/course/1-fuzzy-sets-logic-and-systems-applications</a>
25	Optical Wireless Communications for Beyond 5G Networks and IoT	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-optical-wireless-communications-for-beyond-5g-networks-and-iot">https://online.vtu.ac.in/course/1-optical-wireless-communications-for-beyond-5g-networks-and-iot</a>
26	Operations Research	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-operations-research">https://online.vtu.ac.in/course/1-operations-research</a>
27	Intellectual Property Rights and Competition Law	8 Weeks	2	Link will be updated soon / Search by the Course Name
28	Big Data Computing	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-big-data-computing">https://online.vtu.ac.in/course/1-big-data-computing</a>
29 30	Advanced Linear Continuous Control Systems: Applications With Matlab Programming And Simulink	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-advanced-linear-continuous-control-systems-applications-with-matlab-programming-and-simulink">https://online.vtu.ac.in/course/1-advanced-linear-continuous-control-systems-applications-with-matlab-programming-and-simulink</a>
31	Analog Circuits	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-analog-circuits">https://online.vtu.ac.in/course/1-analog-circuits</a>
32	CMOS Digital VLSI Design	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-cmos-digital-vlsi-design">https://online.vtu.ac.in/course/1-cmos-digital-vlsi-design</a>
33	Electronics Enclosures Thermal issues	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-electronics-enclosures-thermal-issues">https://online.vtu.ac.in/course/1-electronics-enclosures-thermal-issues</a>
34	Microwave Integrated Circuits	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-microwave-integrated-circuits">https://online.vtu.ac.in/course/1-microwave-integrated-circuits</a>
35	Design Of Power Electronic Converters	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-design-of-power-electronic-converters">https://online.vtu.ac.in/course/1-design-of-power-electronic-converters</a>
36	VLSI Interconnects	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-vlsi-interconnects">https://online.vtu.ac.in/course/1-vlsi-interconnects</a>

37	System Design Through Verilog	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-system-design-through-verilog">https://online.vtu.ac.in/course/1-system-design-through-verilog</a>
38	Fundamentals Of MIMO Wireless Communication	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-fundamentals-of-mimo-wireless-communication">https://online.vtu.ac.in/course/1-fundamentals-of-mimo-wireless-communication</a>
39	Foundations of Wavelets and Multirate Digital Signal Processing	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-foundations-of-wavelets-and-multirate-digital-signal-processing">https://online.vtu.ac.in/course/1-foundations-of-wavelets-and-multirate-digital-signal-processing</a>
40	Medical Image Analysis	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-medical-image-analysis">https://online.vtu.ac.in/course/1-medical-image-analysis</a>
41	Recent Advances in Transmission Insulators	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-recent-advances-in-transmission-insulators">https://online.vtu.ac.in/course/1-recent-advances-in-transmission-insulators</a>

## CHEMICAL ENGINEERING

Sl. No	Course Name	Weeks	Credits	Course Link
1	Chemical Process Intensification	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-chemical-process-intensification">https://online.vtu.ac.in/course/1-chemical-process-intensification</a>
2	Aspen Plus® Simulation Software - A Basic Course For Beginners	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-aspen-plus-simulation-software-a-basic-course-for-beginners">https://online.vtu.ac.in/course/1-aspen-plus-simulation-software-a-basic-course-for-beginners</a>
3	Chemical Process Safety	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-chemical-process-safety">https://online.vtu.ac.in/course/1-chemical-process-safety</a>
4	Hydrogen Energy: Production, Storage, Transportation And Safety	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-hydrogen-energy-production-storage-transportation-and-safety">https://online.vtu.ac.in/course/1-hydrogen-energy-production-storage-transportation-and-safety</a>
5	Colloids And Surfaces	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-colloids-and-surfaces">https://online.vtu.ac.in/course/1-colloids-and-surfaces</a>
6	Natural Gas Engineering	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-natural-gas-engineering">https://online.vtu.ac.in/course/1-natural-gas-engineering</a>
7	Trace And Ultra-Trace Analysis Of Metals Using Atomic Absorption Spectrometry	8 Weeks	2	Link will be updated soon / Search by the Course Name
8	Mechanical Operations	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-mechanical-operations">https://online.vtu.ac.in/course/1-mechanical-operations</a>
9	Equipment Design: Mechanical Aspects	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-equipment-design-mechanical-aspects">https://online.vtu.ac.in/course/1-equipment-design-mechanical-aspects</a>

**EI - BM - ML**

<b>Sl. No</b>	<b>Course Name</b>	<b>Weeks</b>	<b>Credits</b>	<b>Course Link</b>
1	Fundamentals Of Micro And Nanofabrication	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-fundamentals-of-micro-and-nanofabrication">https://online.vtu.ac.in/course/1-fundamentals-of-micro-and-nanofabrication</a>
2	Getting Started With Competitive Programming	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-getting-started-with-competitive-programming">https://online.vtu.ac.in/course/1-getting-started-with-competitive-programming</a>
3	Social Network Analysis	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-social-network-analysis">https://online.vtu.ac.in/course/1-social-network-analysis</a>
4	Design & Implementation Of Human-Computer Interfaces	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-design-implementation-of-human-computer-interfaces">https://online.vtu.ac.in/course/1-design-implementation-of-human-computer-interfaces</a>
5	Ethical Hacking	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-ethical-hacking">https://online.vtu.ac.in/course/1-ethical-hacking</a>
6	Programming In Modern C++	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-programming-in-modern-c">https://online.vtu.ac.in/course/1-programming-in-modern-c</a>
7	Data Structure And Algorithms Using Java	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-data-structure-and-algorithms-using-java">https://online.vtu.ac.in/course/1-data-structure-and-algorithms-using-java</a>
8	Introduction To Algorithms And Analysis	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-introduction-to-algorithms-and-analysis">https://online.vtu.ac.in/course/1-introduction-to-algorithms-and-analysis</a>
9	Artificial Intelligence : Search Methods For Problem Solving	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-artificial-intelligence-search-methods-for-problem-solving-iit-madras">https://online.vtu.ac.in/course/1-artificial-intelligence-search-methods-for-problem-solving-iit-madras</a>
10	Fiber Optic Communication Technology	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-fiber-optic-communication-technology">https://online.vtu.ac.in/course/1-fiber-optic-communication-technology</a>
11	Applied Optimization For Wireless, Machine Learning, Big Data	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-applied-optimization-for-wireless-machine-learning-big-data">https://online.vtu.ac.in/course/1-applied-optimization-for-wireless-machine-learning-big-data</a>
12	Block Chain and its Applications	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-block-chain-and-its">https://online.vtu.ac.in/course/1-block-chain-and-its</a>

				<a href="#">applications</a>
13	GPU Architectures and Programming	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-gpu-architectures-and-programming">https://online.vtu.ac.in/course/1-gpu-architectures-and-programming</a>
14	Cloud Computing	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-cloud-computing">https://online.vtu.ac.in/course/1-cloud-computing</a>
15	Computational Systems Biology	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-computational-systems-biology">https://online.vtu.ac.in/course/1-computational-systems-biology</a>
16	Data Analytics with Python	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-data-analytics-with-python">https://online.vtu.ac.in/course/1-data-analytics-with-python</a>
17	Data Mining	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-data-mining">https://online.vtu.ac.in/course/1-data-mining</a>
18	User-centric Computing For Human-Computer Interaction	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-user-centric-computing-for-human-computer-interaction">https://online.vtu.ac.in/course/1-user-centric-computing-for-human-computer-interaction</a>
19	Google Cloud Computing Foundations	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-google-cloud-computing-foundations">https://online.vtu.ac.in/course/1-google-cloud-computing-foundations</a>
20	Discrete Time Signal Processing	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-discrete-time-signal-processing">https://online.vtu.ac.in/course/1-discrete-time-signal-processing</a>
21	Python For Data Science	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-python-for-data-science">https://online.vtu.ac.in/course/1-python-for-data-science</a>

## ELECTRICAL AND ELECTRONICS ENGINEERING

Sl. No	Course Name	Weeks	Credits	Course Link
1.	Design of Photovoltaic Systems	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-design-of-photovoltaic-systems">https://online.vtu.ac.in/course/1-design-of-photovoltaic-systems</a>
2.	Smart Grid: Basics To Advanced Technologies	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-smart-grid-basics-to-advanced-technologies">https://online.vtu.ac.in/course/1-smart-grid-basics-to-advanced-technologies</a>
3.	Enclosure Design Of Electronics Equipment	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-enclosure-design-of-electronics-equipment">https://online.vtu.ac.in/course/1-enclosure-design-of-electronics-equipment</a>
4.	Microelectronics: Devices To Circuits	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-microelectronics-devices-to-circuits">https://online.vtu.ac.in/course/1-microelectronics-devices-to-circuits</a>
5.	Digital Control in Switched Mode Power Converters and FPGA-based Prototyping	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-digital-control-in-switched-mode-power-converters-and-fpga-based-prototyping">https://online.vtu.ac.in/course/1-digital-control-in-switched-mode-power-converters-and-fpga-based-prototyping</a>
6.	Applied Electromagnetics For Engineers	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-applied-electromagnetics-for-engineers">https://online.vtu.ac.in/course/1-applied-electromagnetics-for-engineers</a>
7.	Analog Ic Design	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-analog-ic-design">https://online.vtu.ac.in/course/1-analog-ic-design</a>
8.	Computer Vision and Image Processing - Fundamentals And Applications	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-computer-vision-and-image-processing-fundamentals-and-applications">https://online.vtu.ac.in/course/1-computer-vision-and-image-processing-fundamentals-and-applications</a>
9.	Optical Wireless Communications for Beyond 5G Networks and IoT	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-optical-wireless-communications-for-beyond-5g-networks-and-iot">https://online.vtu.ac.in/course/1-optical-wireless-communications-for-beyond-5g-networks-and-iot</a>
10.	Physics of Nanoscale Devices	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-physics-of-nanoscale-devices">https://online.vtu.ac.in/course/1-physics-of-nanoscale-devices</a>
11.	Power Management Integrated Circuits	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-power-management-integrated-circuits">https://online.vtu.ac.in/course/1-power-management-integrated-circuits</a>

12.	Power System Dynamics, Control and Monitoring	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-power-system-dynamics-control-and-monitoring">https://online.vtu.ac.in/course/1-power-system-dynamics-control-and-monitoring</a>
13.	Semiconductor device modeling and Simulation	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-semiconductor-device-modeling-and-simulation">https://online.vtu.ac.in/course/1-semiconductor-device-modeling-and-simulation</a>
14.	Microelectronics: Devices To Circuits	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-microelectronics-devices-to-circuits">https://online.vtu.ac.in/course/1-microelectronics-devices-to-circuits</a>
15.	Fuzzy Sets, Logic and Systems & Applications Programming And Simulink	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-fuzzy-sets-logic-and-systems-applications">https://online.vtu.ac.in/course/1-fuzzy-sets-logic-and-systems-applications</a>
16.	Advances In Uhv Transmission And Distribution	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-advances-in-uhv-transmission-and-distribution">https://online.vtu.ac.in/course/1-advances-in-uhv-transmission-and-distribution</a>
17.	Advanced Linear Continuous Control Systems: Applications With Matlab	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-advanced-linear-continuous-control-systems-applications-with-matlab-programming-and-simulink">https://online.vtu.ac.in/course/1-advanced-linear-continuous-control-systems-applications-with-matlab-programming-and-simulink</a>
18.	Dc Microgrid And Control Systems	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-dc-microgrid-and-control-systems">https://online.vtu.ac.in/course/1-dc-microgrid-and-control-systems</a>
19.	Electrical Distribution System Analysis	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-electrical-distribution-system-analysis">https://online.vtu.ac.in/course/1-electrical-distribution-system-analysis</a>
20.	VLSI Interconnects	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-vlsi-interconnects">https://online.vtu.ac.in/course/1-vlsi-interconnects</a>
21.	System Design Through Verilog	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-system-design-through-verilog">https://online.vtu.ac.in/course/1-system-design-through-verilog</a>
22.	Analog Circuits	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-analog-circuits">https://online.vtu.ac.in/course/1-analog-circuits</a>
23.	CMOS Digital VLSI Design	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-cmos-digital-vlsi-design">https://online.vtu.ac.in/course/1-cmos-digital-vlsi-design</a>
24.	Electronics Enclosures Thermal issues	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-electronics-enclosures-thermal-issues">https://online.vtu.ac.in/course/1-electronics-enclosures-thermal-issues</a>
25.	Microwave Integrated Circuits	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-microwave-">https://online.vtu.ac.in/course/1-microwave-</a>

				<a href="#">integrated-circuits</a>
26.	Design Of Power Electronic Converters	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-design-of-power-electronic-converters">https://online.vtu.ac.in/course/1-design-of-power-electronic-converters</a>
27.	Foundations of Wavelets and Multirate Digital Signal Processing	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-foundations-of-wavelets-and-multirate-digital-signal-processingq">https://online.vtu.ac.in/course/1-foundations-of-wavelets-and-multirate-digital-signal-processingq</a>
28.	Medical Image Analysis	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-medical-image-analysis">https://online.vtu.ac.in/course/1-medical-image-analysis</a>
29.	Recent Advances in Transmission Insulators	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-recent-advances-in-transmission-insulators">https://online.vtu.ac.in/course/1-recent-advances-in-transmission-insulators</a>
30.	An Introduction To Coding Theory	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-an-introduction-to-coding-theory">https://online.vtu.ac.in/course/1-an-introduction-to-coding-theory</a>
31.	Analysis And Design Principles Of Microwave Antennas	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-analysis-and-design-principles-of-microwave-antennas">https://online.vtu.ac.in/course/1-analysis-and-design-principles-of-microwave-antennas</a>
32.	Design Of Power Electronic Converters	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-design-of-power-electronic-converters">https://online.vtu.ac.in/course/1-design-of-power-electronic-converters</a>
33.	Fundamentals Of MIMO Wireless Communication	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-fundamentals-of-mimo-wireless-communication">https://online.vtu.ac.in/course/1-fundamentals-of-mimo-wireless-communication</a>
34.	Solar Energy Engineering and Technology	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-solar-energy-engineering-and-technology">https://online.vtu.ac.in/course/1-solar-energy-engineering-and-technology</a>

## MECHANICAL ENGINEERING

Sl. No	Course Name	Weeks	Credits	Course Link
1.	Advanced Dynamics	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-advanced-dynamics">https://online.vtu.ac.in/course/1-advanced-dynamics</a>
2.	Advanced Robotics	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-advanced-robotics">https://online.vtu.ac.in/course/1-advanced-robotics</a>
3.	Advanced Thermodynamics And Combustion	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-advanced-thermodynamics-and-combustion">https://online.vtu.ac.in/course/1-advanced-thermodynamics-and-combustion</a>
4.	Aircraft Propulsion	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-aircraft-propulsion">https://online.vtu.ac.in/course/1-aircraft-propulsion</a>
5.	Applied Ergonomics	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-applied-ergonomics">https://online.vtu.ac.in/course/1-applied-ergonomics</a>
6.	Computational Fluid Dynamics For Incompressible Flows	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-computational-fluid-dynamics-for-incompressible-flows">https://online.vtu.ac.in/course/1-computational-fluid-dynamics-for-incompressible-flows</a>
7.	Data-Enabled Tribological Engineering: From Experiments to Predictive Models	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-data-enabled-tribological-engineering-from-experiments-to-predictive-models">https://online.vtu.ac.in/course/1-data-enabled-tribological-engineering-from-experiments-to-predictive-models</a>
8.	Design Of Mechatronic Systems	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-design-of-mechatronic-systems">https://online.vtu.ac.in/course/1-design-of-mechatronic-systems</a>
9.	Dynamic Behaviour Of Materials	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-dynamic-behaviour-of-materials">https://online.vtu.ac.in/course/1-dynamic-behaviour-of-materials</a>
10.	Experimental Stress Analysis	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-experimental-stress-analysis">https://online.vtu.ac.in/course/1-experimental-stress-analysis</a>
11.	Explosions and Safety	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-explosions-and-safety">https://online.vtu.ac.in/course/1-explosions-and-safety</a>
12.	Functional And Conceptual Design	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-functional-and-conceptual-design">https://online.vtu.ac.in/course/1-functional-and-conceptual-design</a>

13.	Fundamentals of Combustion	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-fundamentals-of-mimo-wireless-communication">https://online.vtu.ac.in/course/1-fundamentals-of-mimo-wireless-communication</a>
14.	Fundamentals Of Convective Heat Transfer	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-fundamentals-of-convective-heat-transfer">https://online.vtu.ac.in/course/1-fundamentals-of-convective-heat-transfer</a>
15.	Fundamentals Of Nuclear Power Generation	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-fundamentals-of-nuclear-power-generation">https://online.vtu.ac.in/course/1-fundamentals-of-nuclear-power-generation</a>
16.	Mathematical Modeling Of Manufacturing Processes	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-mathematical-modeling-of-manufacturing-processes">https://online.vtu.ac.in/course/1-mathematical-modeling-of-manufacturing-processes</a>
17.	Metal Additive Manufacturing	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-metal-additive-manufacturing">https://online.vtu.ac.in/course/1-metal-additive-manufacturing</a>
18.	Nonlinear Adaptive Control	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-nonlinear-adaptive-control">https://online.vtu.ac.in/course/1-nonlinear-adaptive-control</a>
19.	Phase Transformation in Materials	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-phase-transformation-in-materials">https://online.vtu.ac.in/course/1-phase-transformation-in-materials</a>
20.	Product Design and Manufacturing	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-product-design-and-manufacturing">https://online.vtu.ac.in/course/1-product-design-and-manufacturing</a>
21.	Robotics: Basics and Selected Advanced Concepts	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-robotics-basics-and-selected-advanced-concepts">https://online.vtu.ac.in/course/1-robotics-basics-and-selected-advanced-concepts</a>
22.	Surface Mining Technology	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-surface-mining-technology">https://online.vtu.ac.in/course/1-surface-mining-technology</a>
23.	X-Ray Crystallography & Diffraction	12 Weeks	3	<a href="https://online.vtu.ac.in/course/1-x-ray-crystallography-diffraction">https://online.vtu.ac.in/course/1-x-ray-crystallography-diffraction</a>
24.	Automatic Control	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-automatic-control">https://online.vtu.ac.in/course/1-automatic-control</a>
25.	Electronic Packaging and Manufacturing	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-electronic">https://online.vtu.ac.in/course/1-electronic</a>

				<a href="#">packaging-and-manufacturing</a>
26.	Electronic Properties Of The Materials: Computational Approach	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-electronic-properties-of-the-materials-computational-approach">https://online.vtu.ac.in/course/1-electronic-properties-of-the-materials-computational-approach</a>
27.	Heat Transfer and Combustion in Multiphase Systems	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-heat-transfer-and-combustion-in-multiphase-systems">https://online.vtu.ac.in/course/1-heat-transfer-and-combustion-in-multiphase-systems</a>
28.	Introduction To Mechanical Vibration	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-introduction-to-mechanical-vibration">https://online.vtu.ac.in/course/1-introduction-to-mechanical-vibration</a>
29.	Laser Based Manufacturing	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-laser-based-manufacturing">https://online.vtu.ac.in/course/1-laser-based-manufacturing</a>
30.	Manufacturing Guidelines For Product Design	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-manufacturing-guidelines-for-product-design">https://online.vtu.ac.in/course/1-manufacturing-guidelines-for-product-design</a>
31.	Mechanical Measurement Systems	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-mechanical-measurement-systems">https://online.vtu.ac.in/course/1-mechanical-measurement-systems</a>
32.	Mechanics And Control Of Robotic Manipulators	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-mechanics-and-control-of-robotic-manipulators">https://online.vtu.ac.in/course/1-mechanics-and-control-of-robotic-manipulators</a>
33.	Mechanism And Robot Kinematics	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-mechanism-and-robot-kinematics">https://online.vtu.ac.in/course/1-mechanism-and-robot-kinematics</a>
34.	Power Plant Engineering	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-power-plant-engineering">https://online.vtu.ac.in/course/1-power-plant-engineering</a>
35.	Processing of Polymers and Polymer Composites	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-processing-of-polymers-and-polymer-composites">https://online.vtu.ac.in/course/1-processing-of-polymers-and-polymer-composites</a>
36.	Product Engineering and Design Thinking	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-product-engineering-and-design-thinking">https://online.vtu.ac.in/course/1-product-engineering-and-design-thinking</a>
37.	Robotics	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-robotics">https://online.vtu.ac.in/course/1-robotics</a>

38.	Theory Of Composite Shells	8 Weeks	2	<a href="https://online.vtu.ac.in/course/1-theory-of-composite-shells">https://online.vtu.ac.in/course/1-theory-of-composite-shells</a>
39.	Welding Application Technology 8	8 Weeks	1	<a href="https://online.vtu.ac.in/course/1-welding-application-technology">https://online.vtu.ac.in/course/1-welding-application-technology</a>
40.	Inspection And Quality Control In Manufacturing	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-inspection-and-quality-control-in-manufacturing">https://online.vtu.ac.in/course/1-inspection-and-quality-control-in-manufacturing</a>
41.	Manufacturing Automation	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-manufacturing-automation">https://online.vtu.ac.in/course/1-manufacturing-automation</a>
42.	Product Design And Development	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-product-design-and-development">https://online.vtu.ac.in/course/1-product-design-and-development</a>
43.	Selection Of Nanomaterials For Energy Harvesting And Storage Application	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-selection-of-nanomaterials-for-energy-harvesting-and-storage-application">https://online.vtu.ac.in/course/1-selection-of-nanomaterials-for-energy-harvesting-and-storage-application</a>
44.	Smart Materials and Intelligent System Design	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-smart-materials-and-intelligent-system-design">https://online.vtu.ac.in/course/1-smart-materials-and-intelligent-system-design</a>
45.	Structural Analysis Of Nanomaterials	4 Weeks	1	<a href="https://online.vtu.ac.in/course/1-structural-analysis-of-nanomaterials">https://online.vtu.ac.in/course/1-structural-analysis-of-nanomaterials</a>

## **Guidelines for Selection of PEC and OEC Courses**

- **Professional Elective Course (PEC):**  
A PEC refers to a course selected from within the same branch or discipline of the student.
- **Open Elective Course (OEC):**  
An OEC refers to a course selected from other branches or disciplines and is multidisciplinary in nature.
- **Content Overlap Declaration:**  
The student certifies that the selected PEC and OEC courses do not partially or fully overlap with any courses already studied in previous semesters.
- **Finality of Submission:**  
Once the application is submitted, the selected PEC and OEC courses shall be treated as final. No requests for modification, change, or interchange of courses will be entertained under any circumstances.
- **Selection of Course:**  
Students must select courses strictly from the list of eligible PEC/OEC courses notified by the University.
- **Mentor Consultation:**  
Students are strongly advised to consult their Mentor/Guide before finalizing the selection of PEC and OEC courses. In case of any doubt or clarification, Mentors/Guides may contact the University for guidance.
- **Examination Mode:**  
Examinations for the selected PEC and OEC courses will be conducted by VTU in **online mode**.

**The following sections provide step-by-step instructions for:**

**A. Account Creation**

**B. Register for PEC/OEC - UG**

**C. Course Enrolment**

**A. Student Account Creation**

1. Visit the portal at <https://online.vtu.ac.in/>.
2. Click on the **Student Login** button located at the top-right corner of the page.
3. If you are a new user, click on **Sign Up**.
4. Enter your **Full Name** and **Email Address**, then click **Send OTP**.
5. Enter the OTP received on your registered email ID and click **Verify**.  
**Note:** If you do not find the OTP in your Inbox, please check other folders such as **Spam, Promotions, Updates, or Notifications**.
6. Provide your **Mobile Number**, create a **Password**, confirm the password, and click **Create Account**.
7. Log in using your registered **Email ID** and **Password**.
8. After successful login, you will be redirected to your **Profile Page**.  
Students must complete all the required fields carefully and ensure that the information entered is accurate, as these details will be used for issuing certificates, awarding credits, and other academic records in the future.

**B. Procedure to Fill PEC/OEC Application**

1. After completing and saving your **Profile**, you will be redirected to the **Student Dashboard**.
2. Click on the **Applications** menu available in the top navigation bar.
3. Select **Register for PEC/OEC – UG**.
4. In the application page, you are not required to re-enter your details.  
Carefully review the pre-filled information and, if all details are accurate, click **Confirm and Continue**.
5. Select the **PEC course** from the dropdown list.
6. Select the **OEC course** from the dropdown list.

7. Read all the conditions carefully before proceeding. Then select **I have read and agree to the Terms and Conditions**.
8. Click on **Submit Application** to complete the registration process.

### **C. Course Enrolment Procedure**

1. Log in using your **Email ID** and **Password**.
2. From the **Student Dashboard**, click on the **Courses** menu.
3. Search for the course you wish to enroll in using the search bar  
**OR**  
Refer to the list of eligible PEC/OEC courses and click on the course link provided.
4. On the **Course Overview** page, click **Enroll Now**.
5. Click on **Dashboard**, then select **My Courses**.
6. All enrolled courses will be displayed under **My Courses**.
7. Click **Start Course** next to the respective course to begin accessing the content.

**Note:** Students must enroll only in the same PEC and OEC courses selected during the PEC/OEC application process. Any course enrolled other than the courses chosen in the application will **not be considered under PEC/OEC**.