



A T M E
College of Engineering

CENTRE FOR ONLINE EDUCATION

B.E HONOURS



Offered By

Visvesvaraya Technological University

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

“Jnana Sangama” Belagavi-590018, Karnataka, India

MOOC COURSES

VTU has launched the award of MOOC Courses (Honours, Minors, Certification Courses and Skill Enhancement Courses) degree programmes.

It has been framed in pursuance of the provisions for this qualification in AICTE model curriculum for undergraduate programmes in Engineering and Technology.

In adopting these provisions, the University has taken steps to ensure that the quality and standard of the Degree awards are not compromised in any way, and they continue to be maintained at a high level.

MOOC COURSES

Honours Degree Programme

Minors Degree Programme.

Certification Courses.

Skill Enhancement Courses.



HONOURS DEGREE

An increasingly interconnected global company (the economies of the world's individual countries considered together as a single economic system) as the result of globalization is creating collaborative opportunities and competitive pressures requiring broadly educated engineers and business professionals.

Also, the next generation engineers have to practice an interdisciplinary approach to problem solving.

The Bachelor of Engineering degree with Honours earned with experiences, Both inside and outside the classroom

It will Enhance after graduation all types of opportunities as professional engineers in the competitive world.

HONOURS DEGREE OUTCOMES



A T M E
College of Engineering

Encourage the advanced levels of study
and multidisciplinary learning

Specialize in a focused area of their
interest.

Learn new skills and methodologies
pertaining to their area of interest.

Enable personal creativity

Cultivate a sustaining interest in advanced
education and research.

HONOURS DEGREE ELIGIBILITY



ATME
College of Engineering

1. The students are eligible to register for B.E/B.Tech Honours Programmes at their 5th sem level by paying onetime non- refundable registration fee of Rs.1000/-
2. The student shall have obtained a **grade $\geq D$** in all courses in the first attempt only, in all semesters until 4th semester(including 4th semester)
3. The Student should have obtained a **CGPA ≥ 7.5** at the end of 4th semester.
4. The Diploma lateral entry students should have completed the Additional Mathematics I and II during 3rd and 4th semester in first attempt only.
5. The B.Sc. Lateral entry should have completed the Engineering Graphics in 4th semester in first attempt only.
6. Elements of Civil Engineering of first year Engineering programme should complete by the end of 4th sem in first attempt only.

HONOURS DEGREE PROCEDURE FOR REGISTRATION



ATME
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1. The students have to register online through <https://online.vtu.ac.in>
2. Click on the Sign in button on the top Right Corner
3. If the students are New User, Click on Create an account.
4. Fill your e-mail Id, Phone No, Name and Create a New Password
5. Click Sign Up, Enter OTP.
6. Login by entering your e-mail Id and Password.
7. You will be taken to student dashboard.
8. Click on Academics on the top right corner.
9. Then Click on Apply for Honour Degree
10. Fill up the details and submit form.
11. The registration fees of Rs.1000/- shall be paid through registration portal only .
12. No other payment mode is accepted and if made, the same will not refunded.



List of Courses for 2021- 22 Admitted Batch

UG COURSES

Textile Engineering						
Sl.No.	Discipline	Course Name	SME Name	Duration	Course Link	Credits
1	Textile Engineering	Principles Of Combing,Roving Preparation & Ring Spinning	Prof. R Chattopadhyay	12 Weeks	https://online.vtu.ac.in/course-details/principles-of-combing-roving-preparation-	3
2	Textile Engineering	Yarn Manufacture I : Principle Of Opening, Carding And Drawing	Prof. R Chattopadhyay	12 Weeks	https://online.vtu.ac.in/course-details/yarn-manufacture-i-principle-of-opening-c	3
3	Textile Engineering	Technical Textiles	Prof. Apurba Das	12 Weeks	https://online.vtu.ac.in/course-details/Technical-Textiles	3
4	Textile Engineering	Science Of Clothing Comfort	Prof. Apurba Das	12 Weeks	https://online.vtu.ac.in/course-details/science-of-clothing-comfort	3
5	Textile Engineering	Textile Finishing	Prof. Kushal Sen	12 Weeks	https://online.vtu.ac.in/course-details/textile-finishing	3
6	Textile Engineering	Science And Technology Of Weft And Warp Knitting	Prof. Bipin Kumar	12 Weeks	https://online.vtu.ac.in/course-details/science-and-technology-of-weft-and-warp-	3

Biotechnology and Bioengineering						
Sl.No.	Discipline	Course Name	SME Name	Duration	Course Link	Credits
1	Biotechnology and Bioengineering	Genetic Engineering: Theory And Application	Prof. Vishal Trivedi, IITG	12 Weeks	https://online.vtu.ac.in/course-details/Genetic-Engineering-Theory-and-Application	3
2	Biotechnology and Bioengineering	Cellular Biophysics: A Framework For Quantitative Biology	Prof. Chaitanya A.Athale, IISER pune	8 Weeks	https://online.vtu.ac.in/course-details/Cellular-Biophysics-A-Framework-For-Que	2
3	Biotechnology and Bioengineering	Medical Image Analysis	Prof. Ganapathy Krishnamurthi, IITM	12 Weeks	https://online.vtu.ac.in/course-details/Medical-Image-Analysis	3
4	Biotechnology and Bioengineering	Computer Aided Drug Design	Prof. Mukesh Doble, IITM	8 Weeks	https://online.vtu.ac.in/course-details/Computer-Aided-Drug-Design	2
5	Biotechnology and Bioengineering	Plant Cell Bioprocessing	Prof. Smita Srivastava, IITM	8 Weeks	https://online.vtu.ac.in/course-details/Plant-Cell-Bioprocessing	2
6	Biotechnology and Bioengineering	Bioreactors	Prof. G.K. Suraishkumar, IITM	4 Weeks	https://online.vtu.ac.in/course-details/Bioreactors	1
7	Biotechnology and Bioengineering	Introduction To Biomedical Imaging Systems	Prof. Arun K. Thittai, IITM	12 Weeks	https://online.vtu.ac.in/course-details/Introduction-To-Biomedical-Imaging-Syste	3
8	Biotechnology and Bioengineering	Organ Printing	Prof. Falguni Pati, IIT Hyderabad	8 Weeks	https://online.vtu.ac.in/course-details/Organ-Printing	2
9	Biotechnology and Bioengineering	Genome Editing And Engineering	Prof. Utpal Bora, IITG	12 Weeks	https://online.vtu.ac.in/course-details/Genome-Editing-And-Engineering	3
10	Biotechnology and Bioengineering	Functional Genomics	Prof. S.Ganesh, IITK	4 Weeks	https://online.vtu.ac.in/course-details/Functional-Genomics	1
11	Biotechnology and Bioengineering	Conservation Geography	Prof. Ankur Awadhiya, IITK	12 Weeks	https://online.vtu.ac.in/course-details/Conservation-Geography	3
12	Biotechnology and Bioengineering	Experimental Biotechnology	Prof. Vishal Trivedi, IITG	12 Weeks	https://online.vtu.ac.in/course-details/Experimental-Biotechnology	3
13	Biotechnology and Bioengineering	Introduction To Mechanobiology	Prof. Shamik Sen, IITB	8 Weeks	https://online.vtu.ac.in/course-details/Introduction-To-Mechanobiology	2
14	Biotechnology and Bioengineering	Industrial Biotechnology	Prof. Debabrata Das, IITKGP	12 Weeks	https://online.vtu.ac.in/course-details/Industrial-Biotechnology	3
15	Biotechnology and Bioengineering	Maternal Infant Young Child Nutrition	Prof. Rupal Dalal	12 Weeks	Link will be Updated Soon	3
16	Biotechnology and Bioengineering	Pharmacognosy & Metabolic Engineering	Prof. Adinpunya Mitra	12 weeks	Link will be Updated Soon	3
17	Biotechnology and Bioengineering	I Think Biology	Prof. Kaustubh Rau Prof. Sravanti Uppaluri Prof. Divya Uma Prof. Jayanti Ray Mukherjee	12 Weeks	Link will be Updated Soon	3
18	Biotechnology and Bioengineering	Classics in Neuroscience	Prof. Prachi Gupta	8 Weeks	Link will be Updated Soon	3
19	Biotechnology and Bioengineering	Physical And Electrochemical Characterizations In Chemical Engineering	Prof. Varadhan SKM	8 Weeks	Link will be Updated Soon	2
			Prof. Tamal Banerjee	8 Weeks	Link will be Updated Soon	2

Computer Science and Engineering						
Sl.No.	Discipline	Course Name	SME Name	Duration	Course Link	Credits
1	Computer Science and Engineering	Artificial Intelligence : Search Methods For Problem Solving	Prof. Deepak Khemani	12 Weeks	https://online.vtu.ac.in/course-details/Artificial-Intelligence-Search-Methods-For-Problem-Solving	3
2	Computer Science and Engineering	Introduction To Haskell Programming	Prof. S. P Suresh	8 Weeks	https://online.vtu.ac.in/course-details/Introduction-To-Haskell-Programming	2
3	Computer Science and Engineering	C Programming And Assembly Language	Prof. Janakiraman Viraraghavan	4 Weeks	https://online.vtu.ac.in/course-details/C-Programming-And-Assembly-Language	1
4	Computer Science and Engineering	Software Testing (IITKGP)	Prof. Rajib Mall	4 Weeks	https://online.vtu.ac.in/course-details/Software-Testing-IITKGP	1
5	Computer Science and Engineering	Introduction To Industry 4.0 And Industrial Internet Of Things	Prof. Sudip Misra	12 Weeks	https://online.vtu.ac.in/course-details/Introduction-To-Industry-40-And-Industria	3
6	Computer Science and Engineering	Natural Language Processing	Prof. Pawan Goyal	12 Weeks	https://online.vtu.ac.in/course-details/Natural-Language-Processing	3
7	Computer Science and Engineering	The Joy Of Computing Using Python	Prof. Sudarshan Iyengar	12 Weeks	https://online.vtu.ac.in/course-details/The-Joy-of-Computing-using-Python	3
8	Computer Science and Engineering	Modern Algebra	Prof. Manindra Agrawal	8 Weeks	https://online.vtu.ac.in/course-details/Modern-Algebra	2
9	Computer Science and Engineering	Data Base Management System	Prof. Partha Pratim Das Prof. Samiran Chattopadhyay	8 Weeks	https://online.vtu.ac.in/course-details/Data-Base-Management-System-384165	2
10	Computer Science and Engineering	Python For Data Science	Prof. Ragunathan Rengasamy	4 Weeks	https://online.vtu.ac.in/course-details/Python-for-Data-Science	1
11	Computer Science and Engineering	Introduction To Machine Learning	Prof. Balaraman Ravindran	12 Weeks	https://online.vtu.ac.in/course-details/Introduction-to-Machine-Learning	3
12	Computer Science and Engineering	Data Science For Engineers	Prof. Ragunathan Rengasamy	8 Weeks	https://online.vtu.ac.in/course-details/Data-Science-for-Engineers-815403	2
13	Computer Science and Engineering	Programming, Data Structures And Algorithms Using Python	Prof. Shankar Narasimhan	8 Weeks	https://online.vtu.ac.in/course-details/Programming-Data-Structures-And-Algorit	2
14	Computer Science and Engineering	Google Cloud Computing Foundations	Prof. Madhavan Mukund	8 Weeks	https://online.vtu.ac.in/course-details/Google-Cloud-Computing-Foundations	2
15	Computer Science and Engineering	Cloud Computing	Prof. Soumya Kanti Ghosh	12 Weeks	https://online.vtu.ac.in/course-details/Cloud-Computing	3

16	Computer Science and Engineering	Programming In Java	Prof. Debasis Samanta	12 Weeks	https://online.vtu.ac.in/course-details/Programming-In-Java	3
17	Computer Science and Engineering	Getting Started With Competitive Programming	Prof. Neeldhara Misra	12 Weeks	https://online.vtu.ac.in/course-details/Getting-Started-with-Competitive-Program	3
18	Computer Science and Engineering	AI: Constraint Satisfaction	Prof. Deepak Khemani	8 Weeks	Link will be Updated Soon	2
19	Computer Science and Engineering	Foundation of Cloud IoT Edge ML	Prof. Rajiv Misra	8 Weeks	Link will be Updated Soon	2
20	Computer Science and Engineering	Information Security - 5 - Secure Systems Engineering	Prof. Chester Robeiro	8 Weeks	Link will be Updated Soon	2

Aerospace Engineering

Sl.No.	Discipline	Course Name	SME Name	Duration	Course Link	Credits
1	Aerospace Engineering	Aircraft Stability And Control	Prof. A.K.Ghosh	12 Weeks	https://online.vtu.ac.in/course-details/Aircraft-Stability-And-Control	3
2	Aerospace Engineering	Introduction To Airplane Performance	Prof. A K Ghosh	8 Weeks	https://online.vtu.ac.in/course-details/Introduction-To-Airplane-Performance	2
3	Aerospace engineering	Introduction To Airbreathing Propulsion	Prof. Ashoke De	12 Weeks	https://online.vtu.ac.in/course-details/Introduction-To-Airbreathing-Propulsion	3
4	Aerospace Engineering	Design Of Fixed Wing Unmanned Aerial Vehicles	Prof. Subrahmanyam Saderla	8 Weeks	https://online.vtu.ac.in/course-details/Design-Of-Fixed-Wing-Unmanned-Aerial-V	2
5	Aerospace Engineering	Introduction To Aerospace Engineering-Flight	Prof. Rajkumar Pant	12 Weeks	https://online.vtu.ac.in/course-details/Introduction-To-Aerospace-Engineering-Fli	3
6	Aerospace engineering	Introduction To Aircraft Design	Prof. Rajkumar Pant	12 Weeks	https://online.vtu.ac.in/course-details/Introduction-To-Aircraft-Design	3
7	Aerospace Engineering	Space Flight Mechanics	Prof. Manoranjan Sinha	12 Weeks	https://online.vtu.ac.in/course-details/Space-Flight-Mechanics	3
8	Aerospace Engineering	Vibration And Structural Dynamics	Prof. Mira Mitra	8 Weeks	https://online.vtu.ac.in/course-details/Vibration-And-Structural-Dynamics	2
9	Aerospace Engineering	Aerodynamic Design Of Axial Flow Compressors & Fans	Prof. Chetankumar Sureshbhai Mistry	12 Weeks	https://online.vtu.ac.in/course-details/Aerodynamic-Design-Of-Axial-Flow-Comp	3
10	Aerospace Engineering	Gasdynamics: Fundamentals and Applications	Prof. Srisha Rao M V	12 Weeks	Link will be Updated Soon	3
11	Aerospace Engineering	Introduction to Aircraft Control System	Prof. Dipak Kumar Giri	12 Weeks	Link will be Updated Soon	3
12	Aerospace Engineering	Fundamentals of Supersonic and Hypersonic Flow	Prof. Arnab Roy	12 Weeks	Link will be Updated Soon	3

Management

Sl.No.	Discipline	Course Name	SME Name	Duration	Course Link	Credits
1	Management	Toyota Production System	Prof. Rajat Agrawal	8 Weeks	https://online.vtu.ac.in/course-details/Toyota-Production-System	2
2	Management	Training Of Trainers	Prof. Santosh Rangnekar	12 Weeks	https://online.vtu.ac.in/course-details/Training-Of-Trainers	3
3	Management	Business Analytics & Data Mining Modeling Using R Part II	Prof. Gaurav Dixit	4 Weeks	https://online.vtu.ac.in/course-details/Business-Analytics-Data-Mining-Modeling	1
4	Management	Yoga And Positive Psychology For Managing Career And Life	Prof. Ashish Pandey	8 Weeks	https://online.vtu.ac.in/course-details/Yoga-And-Positive-Psychology-For-Manag	2
5	Management	Decision-Making Under Uncertainty	Prof. N. Gautam	4 Weeks	https://online.vtu.ac.in/course-details/Decision-Making-Under-Uncertainty	1
6	Management	Design Thinking - A Primer	Prof. Ashwin Mahalingam	4 Weeks	https://online.vtu.ac.in/course-details/Design-Thinking-A-Primer	1
7	Management	Strategy And Technology: A Practical Primer	Prof. Bala Ramadurai	12 Weeks	https://online.vtu.ac.in/course-details/Strategy-And-Technology-A-Practical-Prim	3
8	Management	Marketing Management - I	Prof. C Bhaktavatsala Rao	8 Weeks	https://online.vtu.ac.in/course-details/Strategy-And-Technology-A-Practical-Prim	2
9	Management	Game Theory	Prof. Jayanti Chatterjee	8 Weeks	https://online.vtu.ac.in/course-details/Strategy-And-Technology-A-Practical-Prim	2
10	Management	E-Business	Prof. Shashi Shekhar	8 Weeks	https://online.vtu.ac.in/course-details/game-theory	2
11	Management	Corporate Finance	Prof. K.S. Mallikarjuna Rao	12 Weeks	https://online.vtu.ac.in/course-details/E-Business	3
12	Management	Strategic Management For Competitive Advantage	Prof. Mamata Jenamani	12 Weeks	https://online.vtu.ac.in/course-details/E-Business	2
13	Management	Econometric Modelling	Prof. Abhijeet Chandra	8 Weeks	https://online.vtu.ac.in/course-details/corporate-finance	2
14	Management	Industrial Safety Engineering	Prof. Sanjib Chowdhury	12 Weeks	https://online.vtu.ac.in/course-details/strategic-management-for-competitive-adv	3
			Prof. Sujata Kar	8 Weeks	https://online.vtu.ac.in/course-details/econometric-modelling	2
			Prof. Jharieswar Maiti	12 Weeks	https://online.vtu.ac.in/course-details/industrial-safety-engineering	3

Mechanical Engineering

Sl.No.	Discipline	Course Name	SME Name	Duration	Course Link	Credits
1	Mechanical Engineering	Fundamentals Of Convective Heat Transfer	Prof. Amaresh Dalal	12 Weeks	https://online.vtu.ac.in/course-details/fundamentals-of-convective-heat-transfer	3
2	Mechanical Engineering	Aircraft Propulsion	Prof. Vinayak N. Kulkarni	12 Weeks	https://online.vtu.ac.in/course-details/Aircraft-Propulsion	3
3	Mechanical Engineering	Laser Based Manufacturing	Prof. S. N. Joshi	8 Weeks	https://online.vtu.ac.in/course-details/Laser-Based-Manufacturing	2
4	Mechanical Engineering	Mathematical Modeling Of Manufacturing Processes	Prof. Swarup Bag	12 Weeks	https://online.vtu.ac.in/course-details/mathematical-modeling-of-manufacturing-	3
5	Mechanical Engineering	Welding Application Technology	Prof. Pankaj Biswas	8 Weeks	https://online.vtu.ac.in/course-details/welding-application-technology	2
6	Mechanical Engineering	Robotics	Prof. Dk Pratihar	8 Weeks	https://online.vtu.ac.in/course-details/Robotics	2
7	Mechanical Engineering	Product Design And Development	Prof. Inderdeep Singh	4 Weeks	https://online.vtu.ac.in/course-details/product-design-and-development	1
8	Mechanical Engineering	Principles Of Metal Forming Technology	Prof. P. K. Jha	8 Weeks	https://online.vtu.ac.in/course-details/principles-of-metal-forming-technology	2
9	Mechanical Engineering	Selection Of Nanomaterials For Energy Harvesting And Storage Application	Prof. Kaushik Pal	4 Weeks	https://online.vtu.ac.in/course-details/selection-of-nanomaterials-for-energy-harv	1
10	Mechanical Engineering	Structural Analysis Of Nanomaterials	Prof. Kaushik Pal	4 Weeks	https://online.vtu.ac.in/course-details/structural-analysis-of-nanomaterials	1
11	Mechanical Engineering	Introduction To Mechanical Vibration	Prof. Anil Kumar	8 Weeks	https://online.vtu.ac.in/course-details/introduction-to-mechanical-vibration	2
12	Mechanical Engineering	Fundamentals Of Manufacturing Processes	Prof. D. K. Dwivedi	12 Weeks	https://online.vtu.ac.in/course-details/fundamentals-of-manufacturing-processes	3
13	Mechanical Engineering	Design Of Mechatronic Systems	Prof. Prasanna Gandhi	12 Weeks	https://online.vtu.ac.in/course-details/design-of-mechatronic-systems	3
14	Design Engineering	Functional And Conceptual Design	Prof. Asokan T	12 Weeks	https://online.vtu.ac.in/course-details/functional-and-conceptual-design	3
15	Mechanical Engineering	Manufacturing Guidelines For Product Design	Prof. Inderdeep Singh	8 Weeks	Link will be Updated Soon	2
16	Mechanical Engineering	Mechatronics	Prof. Pushparaj Mani Pathak	8 Weeks	Link will be Updated Soon	2
17	Mechanical Engineering	Power Plant System Engineering	Prof. Niranjana Sahoo	12 Weeks	Link will be Updated Soon	3

18	Mechanical Engineering	Thermal Engineering: Basic and Applied	Prof. Pranab K. Mondal	12 Weeks	Link will be Updated Soon	3
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EL-BM-ML

Sl.No.	Discipline	Course Name	SME Name	Duration	Course Link	Credits
1	Electrical, Electronics and Communications	Fundamentals Of Micro And Nanofabrication	Prof. Sushobhan Avasti Prof. Shankar Selvaraja	12 Weeks	https://online.vtu.ac.in/course-details/Fundamentals-Of-Micro-And-Nanofabrication	3
2	Computer Science and Engineering	Getting Started With Competitive Programming	Prof. Neeldhara Misra	12 Weeks	https://online.vtu.ac.in/course-details/Getting-Started-with-Competitive-Program	3
3	Computer Science and Engineering	Social Network Analysis	Prof. Tanmoy Chakraborty	12 Weeks	https://online.vtu.ac.in/course-details/social-network-analysis	3
4	Computer Science and Engineering	Design & Implementation Of Human-Computer Interfaces	Prof. Samit Bhattacharya	12 Weeks	https://online.vtu.ac.in/course-details/Design-Implementation-Of-Human-Comp	3
5	Computer Science and Engineering	Ethical Hacking	Prof. Indranil Sengupta	12 Weeks	https://online.vtu.ac.in/course-details/Ethical-Hacking	3
6	Computer Science and Engineering	Programming In Modern C++	Prof. Partha Pratim Das	12 Weeks	https://online.vtu.ac.in/course-details/programming-in-modern-c	3
7	Computer Science and Engineering	Data Structure And Algorithms Using Java	Prof. Debasis Samanta	12 Weeks	https://online.vtu.ac.in/course-details/data-structure-and-algorithms-using-java	3
8	Computer Science and Engineering	Introduction To Algorithms And Analysis	Prof. Sourav Mukhopadhyay	12 Weeks	https://online.vtu.ac.in/course-details/Introduction-To-Algorithms-And-Analysis	3
9	Computer Science and Engineering	Google Cloud Computing Foundations	Prof. Soumya Kanti Ghosh	8 Weeks	https://online.vtu.ac.in/course-details/Google-Cloud-Computing-Foundations	2
10	Computer Science and Engineering	Artificial Intelligence : Search Methods For Problem Solving	Prof. Deepak Khemani	12 Weeks	https://online.vtu.ac.in/course-details/Artificial-Intelligence-Search-Methods-For-	3
11	Computer Science and Engineering	Python For Data Science	Prof. Ragnathan Rengasamy	4 Weeks	https://online.vtu.ac.in/course-details/Python-for-Data-Science	1
12	Electrical and Electronics Engineering	Discrete Time Signal Processing	Prof. Mrityunjay Chakraborty	8 Weeks	https://online.vtu.ac.in/course-details/Discrete-Time-Signal-Processing	2
13	Electrical and Electronics Engineering	Fiber Optic Communication Technology	Prof. Deepa Venkitesh	12 Weeks	https://online.vtu.ac.in/course-details/Fiber-Optic-Communication-Technology	3
14	Electrical and Electronics Engineering	Applied Optimization For Wireless, Machine Learning, Big Data	Prof. Aditya K. Jagannatham	12 Weeks	https://online.vtu.ac.in/course-details/Applied-Optimization-For-Wireless-Machi	3
15	Electrical and Electronics Engineering	Design and Analysis of VLSI Subsystems	Prof. Madhav Rao	12 Weeks	Link will be Updated Soon	3
16	Management	Innovation in Marketing and Marketing of Innovation	Prof. Vinay Sharma	12 Weeks	Link will be Updated Soon	3

Chemical Engineering

Sl.No.	Discipline	Course Name	SME Name	Duration	Course Link	Credits
1	Chemical Engineering	Colloids And Surfaces	Prof. Basavaraj Madivala Gurappa	8 Weeks	https://online.vtu.ac.in/course-details/Colloids-And-Surfaces	2
2	Chemical Engineering	Chemical Process Intensification	Prof. Subrata Kumar Majumder	12 Weeks	https://online.vtu.ac.in/course-details/Chemical-Process-Intensification	3
3	Chemical Engineering	Transport Phenomena Of Non-Newtonian Fluids	Prof. Nanda Kishore	12 Weeks	https://online.vtu.ac.in/course-details/Transport-Phenomena-Of-Non-Newtonian-	3
4	Chemical Engineering	Natural Gas Engineering	Prof. Pankaj Tiwari	8 Weeks	https://online.vtu.ac.in/course-details/Natural-Gas-Engineering	2
5	Chemical Engineering	Aspen Plus® Simulation Software - A Basic Course For Beginners	Prof. Prabirkumar Saha	12 Weeks	https://online.vtu.ac.in/course-details/Aspen-Plus%C2%AE-Simulation-Software-	3
6	Chemical Engineering	Chemical Process Control	Prof. Sujit Jogwar	8 Weeks	https://online.vtu.ac.in/course-details/chemical-process-control	2
7	Chemical Engineering	Trace And Ultra-Trace Analysis Of Metals Using Atomic Absorption Spectrometry	Prof. J R Mudakavi	8 Weeks	https://online.vtu.ac.in/course-details/trace-and-ultra-trace-analysis-of-metals-usi	2
8	Chemical Engineering	Mechanical Operations	Prof. Shabina Khanam	4 Weeks	https://online.vtu.ac.in/course-details/mechanical-operations	1
9	Chemical Engineering	Equipment Design: Mechanical Aspects	Prof. Shabina Khanam	4 Weeks	https://online.vtu.ac.in/course-details/equipment-design-mechanical-aspects	1
10	Chemical Engineering	Chemical Process Safety	Prof. Shishir Sinha	12 weeks	https://online.vtu.ac.in/course-details/chemical-process-safety	3
11	Chemical Engineering	Basic Environmental Engineering And Pollution Abatement	Prof. P. Mondal	12 weeks	https://online.vtu.ac.in/course-details/basic-environmental-engineering-and-pollu	3
12	Chemical Engineering	Technologies For Clean And Renewable Energy Production	Prof. P. Mondal	8 Weeks	https://online.vtu.ac.in/course-details/technologies-for-clean-and-renewable-ener	2
13	Chemical Engineering	Hydrogen Energy: Production, Storage, Transportation And Safety	Prof. Pratibha Sharma	12 Weeks	https://online.vtu.ac.in/course-details/hydrogen-energy-production-storage-trans	3
14	Chemical Engineering	Applied Statistical Thermodynamics	Prof. Tamal Banerjee	12 Weeks	Link will be Updated Soon	3
15	Chemical Engineering	Unit operations of particulate matter	Prof. Shabina Khanam	4 Weeks	Link will be Updated Soon	1

General

Sl.No.	Discipline	Course Name	SME Name	Duration	Course Link	Credits
1	Economics	Economics Of Banking And Finance Markets	Prof. Sukumar Vellakkal	12 Weeks	https://online.vtu.ac.in/course-details/economics-of-banking-and-finance-markets	3
2	Multidisciplinary	Introduction To Research New title: Research Methodology	Prof. Edamana Prasad Prof. Prathap Haridoss	8 Weeks	https://online.vtu.ac.in/course-details/Introduction-to-Research-Research-Method	2
3	Multidisciplinary	Solar Energy Engineering And Technology	Prof. Pankaj Kalita	12 Weeks	https://online.vtu.ac.in/course-details/solar-energy-engineering-and-technology	3
4	Humanities and Social Sciences	Technical English For Engineers	Prof. Aysha Iqbal	8 Weeks	https://online.vtu.ac.in/course-details/technical-english-for-engineers	2
5	Humanities and Social Sciences	Body Language: Key To Professional Success	Prof. Rashmi Gaur	4 Weeks	https://online.vtu.ac.in/course-details/Body-Language-Key-To-Professional-Succe	1
6	Humanities and Social Sciences	Patent Law For Engineers And Scientists	Prof. Feroz Ali	12 Weeks	https://online.vtu.ac.in/course-details/Patent-Law-For-Engineers-And-Scientists	3
7	Humanities and Social Sciences	German - I	Prof. Milind Brahma	12 Weeks	https://online.vtu.ac.in/course-details/German-I	3
8	Humanities and Social Sciences	The Science of Happiness and Wellbeing	Prof. Priyadarshi Patnaik Prof. Manas K Mandal	8 Weeks	https://online.vtu.ac.in/course-details/The-Science-of-Happiness-and-Wellbeing-5	2
9	Mathematics	Calculus For Economics, Commerce And Management	Prof. I.K.Rana	8 Weeks	https://online.vtu.ac.in/course-details/Calculus-For-EconomicsCommerce-And-M	2
10	Mathematics	Advanced Engineering Mathematics	Prof. P.N. Agarwal	12 Weeks	https://online.vtu.ac.in/course-details/advanced-engineering-mathematics	3
11	Management	Entrepreneurship	Prof. C Bhaktavatsala Rao	12 Weeks	https://online.vtu.ac.in/course-details/Entrepreneurship	3
12	Management	E-Business	Prof. Mamata Jenamani	12 Weeks	https://online.vtu.ac.in/course-details/E-Business	3

13	Electrical and Electronics Engineering	An Introduction To Coding Theory	Prof. Adrish Banerjee	8 Weeks	https://online.vtu.ac.in/course-details/an-introduction-to-coding-theory	2
14	Electrical and Electronics Engineering	Smart Grid: Basics To Advanced Technologies	Prof. N.P. Padhy	12 Weeks	https://online.vtu.ac.in/course-details/Smart-Grid-Basics-To-Advanced-Technologies	3
15	Computer Science and Engineering	Cloud Computing	Prof. Soumya Kanti Ghosh	12 Weeks	https://online.vtu.ac.in/course-details/Cloud-Computing	3
16	Computer Science and Engineering	Introduction To Machine Learning - IITKGP	Prof. Sudeshna Sarkar	8 Weeks	https://online.vtu.ac.in/course-details/Introduction-to-Machine-Learning	2
17	Computer Science and Engineering	Programming In Java	Prof. Debasis Samanta	12 Weeks	https://online.vtu.ac.in/course-details/Programming-In-Java	3
18	Physics	Introduction To Astrophysical Fluids	Prof. Supratik Banerjee	12 Weeks	https://online.vtu.ac.in/course-details/Introduction-To-Astrophysical-Fluids	3
19	Physics	Advanced Quantum Mechanics With Applications	Prof. Saurabh Basu	8 Weeks	https://online.vtu.ac.in/course-details/Advanced-Quantum-Mechanics-With-App	2
20	Mechanical Engineering	Applied Thermodynamics For Engineers	Prof. Dipankar N. Basu	12 Weeks	https://online.vtu.ac.in/course-details/Applied-Thermodynamics-For-Engineers	3

Electronics and Communication Engineering

Sl.No.	Discipline	Course Name	SME Name	Duration	Course Link	Credits
1	Computer Science & Engineering	Artificial Intelligence : Search methods for problem solving Prof. Deepak Khemani	Prof. Deepak Khemani	12 Weeks	https://online.vtu.ac.in/course-details/Artificial-Intelligence-Search-Methods-For-	3
2	Design Engineering	Understanding Incubation and Enterprenurship Prof. B K Chakravarthy	Understanding Incubation and Enterprenurship Prof. B K Chakravarthy	12 Weeks	https://online.vtu.ac.in/course-details/Understanding-Incubation-and-Entreprene	3
3	Multidisciplinary	Learning Anlystics Tools Prof. Rajkumar Rajendram	Learning Anlystics Tools Prof. Rajkumar Rajendram	12 Weeks	https://online.vtu.ac.in/course-details/Learning-Analytics-Tools	3
4	Mathematics	Operations Research Prof. Kusumdeep	Operations Research Prof. Kusumdeep	8 Weeks	https://online.vtu.ac.in/course-details/Operations-Research	2
5	Management	Intellctual Property Rights and Competition Law Prof. K. D. Raju Prof. Niharika Sahoo Bhattacharya	Intellctual Property Rights and Competition Law Prof. K. D. Raju Prof. Niharika Sahoo Bhattacharya	8 Weeks	https://online.vtu.ac.in/course-details/Intellectual-Property-Rights-and-Competiti	2
6	Computer Science & Engineering	Big Data Computing	Big Data Computing,	8 Weeks	https://online.vtu.ac.in/course-details/BIG-DATA-COMPUTING	2
7	Electrical and Electronics Engineering	Modern Digital Communication Techniques	PROF. SUVRA SEKHAR DAS	12 Weeks	https://online.vtu.ac.in/course-details/Modern-digital-communication-techniques	3
8	Electrical and Electronics Engineering	Advanced Linear Continuous Control Systems: Applications With Matlab Programming And Simulink	PROF. YOGESH VIJAY HOTE	8 Weeks	https://online.vtu.ac.in/course-details/Advanced-Linear-Continuous-Control-Syst	2
9	Electrical and Electronics Engineering	Fundamentals of semiconductor devices		12 Weeks	Link will be Updated Soon	3
10	Electrical and Electronics Engineering	Embedded Sensing, Actuation and Interfacing Systems	Prof. Banibrata Mukherjee	12 Weeks	Link will be Updated Soon	3
11	Electrical and Electronics Engineering	Optical Wireless Communications for Beyond 5G Networks and IoT		12 Weeks	Link will be Updated Soon	3
12	Electrical and Electronics Engineering	Digital Protection of Power System		8 Weeks	Link will be Updated Soon	2

Electrical and Electronics Engineering

Sl.No.	Discipline	Course Name	SME Name	Duration	Course Link	Credits
1	Electrical and Electronics Engineering	Design of Photovoltaic Systems	Design of Photovoltaic Systems, Prof. I. Umanand	12 weeks	https://online.vtu.ac.in/course-details/design-of-photovoltaic-systems	3
2	Electrical and Electronics Engineering	Smart Grid: Basics To Advanced Technologies	Smart Grid: Basics To Advanced Technologies Prof. N.P. Padhy	12 weeks	https://online.vtu.ac.in/course-details/Smart-Grid-Basics-To-Advanced-Technologies	3
3	Electrical and Electronics Engineering	Advances In Uhv Transmission And Distribution	Advances In Uhv Transmission And Distribution, Prof Subba Reddy	8 Weeks	https://online.vtu.ac.in/course-details/advances-in-uhv-transmission-and-distribu	2
4	Electrical and Electronics Engineering	Enclosure Design Of Electronics Equipment	Enclosure Design Of Electronics Equipment, Prof. N. V Chalapathi Rao	12 Weeks	https://online.vtu.ac.in/course-details/enclosure-design-of-electronics-equipment	3
5	Electrical and Electronics Engineering	Microelectronics: Devices To Circuits	Microelectronics: Devices To Circuits, Prof. Sudeb Dasgupta	12 Weeks	https://online.vtu.ac.in/course-details/Microelectronics-Devices-To-Circuits	3
6	Electrical and Electronics Engineering	Advanced Linear Continuous Control Systems: Applications With Matlab Programming And Simulink	Advanced Linear Continuous Control Systems: Applications With Matlab Programming And Simulink, Prof. Yogesh Vijay Hote	8 Weeks	https://online.vtu.ac.in/course-details/Advanced-Linear-Continuous-Control-Syst	2
7	Electrical and Electronics Engineering	Dc Microgrid And Control Systems	Dc Microgrid And Control Systems, Prof. Avik Bhattacharya	8 Weeks	https://online.vtu.ac.in/course-details/dc-microgrid-and-control-systems	2
8	Electrical and Electronics Engineering	Electrical Distribution System Analysis	Electrical Distribution System Analysis, Prof. G. B. Kumbhar	8 Weeks	https://online.vtu.ac.in/course-details/electrical-distribution-system-analysis	2
9	Electrical and Electronics Engineering	Digital Control in Switched Mode Power Converters and FPGA-based Prototyping	Digital Control in Switched Mode Power Converters and FPGA-based Prototyping, Prof. Santanu Kapat	12 Weeks	https://online.vtu.ac.in/course-details/digital-control-in-switched-mode-power-co	3

10	Electrical and Electronics Engineering	VLSI Interconnects	VLSI Interconnects, Prof. Sarang Pendharker	8 Weeks	https://online.vtu.ac.in/course-details/vlsi-interconnects	2
11	Electrical and Electronics Engineering	System Design Through Verilog	System Design Through Verilog, Prof. Shaik Rafi Ahamed	8 Weeks	https://online.vtu.ac.in/course-details/system-design-through-verilog	2
12	Electrical and Electronics Engineering	Applied Electromagnetics For Engineers	Applied Electromagnetics For Engineers, Prof. Pradeep Kumar K	12 Weeks	https://online.vtu.ac.in/course-details/Applied-Electromagnetics-For-Engineers	3
13	Electrical and Electronics Engineering	Fundamentals of semiconductor devices	Fundamentals of semiconductor devices, Prof. Digbijoy N. Nath	12 Weeks	Link will be Updated Soon	3
14	Electrical and Electronics Engineering	A brief introduction of Micro - Sensors	A brief introduction of Micro - Sensors, Prof. Santanu Talukder	4 Weeks	Link will be Updated Soon	1
15	Electrical and Electronics Engineering	Electric Vehicles - Part 1	Electric Vehicles - Part 1, Prof. Amit Jain	8 Weeks	Link will be Updated Soon	2
16	Electrical and Electronics Engineering	Industrial Automation And Control	Industrial Automation And Control, Prof. Alokkanti Deb	12 Weeks	Link will be Updated Soon	3
17	Electrical and Electronics Engineering	Signal Processing Techniques and its Applications	Signal Processing Techniques and its Applications, Prof. Shyamal Das Mandal	12 Weeks	Link will be Updated Soon	3

Automobile Engineering

Sl.No.	Discipline	Course Name	SME Name	Duration	Course Link	Credits
1	Mechanical Engineering	Computational Continuum Mechanics	Prof. Sachin Singh Gautam	12 Weeks	https://online.vtu.ac.in/course-details/computational-continuum-mechanics	3
2	Mechanical Engineering	Mechanism And Robot Kinematics	Prof. Anirvan Dasgupta	8 Weeks	https://online.vtu.ac.in/course-details/Mechanism-And-Robot-Kinematics	2
3	Mechanical Engineering	Heat Exchangers: Fundamentals And Design Analysis	Prof. Prasanta Kr Das & Prof. Indranil Ghosh	12 Weeks	https://online.vtu.ac.in/course-details/heat-exchangers-fundamentals-and-design	3
4	Mechanical Engineering	Power Plant Engineering	Prof. Ravi Kumar	8 Weeks	https://online.vtu.ac.in/course-details/Power-Plant-Engineering	2
5	Mechanical Engineering	Fluid Dynamics And Turbomachines	Prof. Dhiman Chatterjee Prof. Shamit Bakshi	8 Weeks	https://online.vtu.ac.in/course-details/Fluid-Dynamics-And-Turbomachines	2
6	Mechanical Engineering	Rapid Manufacturing	Prof. J. Ramkumar Prof. Amandeep Singh	12 Weeks	https://online.vtu.ac.in/course-details/rapid-manufacturing	3
7	Mechanical Engineering	Conduction And Convection: Fundamentals And Applications	Prof. Gautam Biswas / Prof. Sameer Khandekar	12 Weeks	https://online.vtu.ac.in/course-details/Conduction-And-Convection-Fundamental	3
8	Management	Toyota Production System	Prof. Rajat Agrawal	8 Weeks	https://online.vtu.ac.in/course-details/Toyota-Production-System	2
9	Management	Manufacturing Strategy	Prof. Rajat Agrawal	8 Weeks	https://online.vtu.ac.in/course-details/manufacturing-strategy	2
10	Management	Product And Brand Management	Prof. Vinay Sharma	12 weeks	https://online.vtu.ac.in/course-details/product-and-brand-management	3
11	Management	Econometric Modelling	Prof. Sujata Kar	8 Weeks	https://online.vtu.ac.in/course-details/econometric-modelling	2
12	Management	Services Marketing : Integrating People, Technology, Strategy	Prof. Zillur Rahman	8 Weeks	https://online.vtu.ac.in/course-details/services-marketing-integrating-people-tech	2
13	Management	Innovation, Business Models And Entrepreneurship	Prof. Rajat Agrawal Prof. Vinay Sharma	8 Weeks	https://online.vtu.ac.in/course-details/innovation-business-models-and-entrepren	2
14	Management	Operations And Supply Chain Management	Prof. G. Srinivasan	12 Weeks	https://online.vtu.ac.in/course-details/operations-and-supply-chain-management	3
15	Management	Design Thinking - A Primer	Prof. Ashwin Mahalingam Prof. Bala Ramadurai	4 Weeks	https://online.vtu.ac.in/course-details/Design-Thinking-A-Primer	1

Civil Engineering

Sl.No.	Discipline	Course Name	SME Name	Duration	Course Link	Credits
1	Civil Engineering	Finite Element Method And Computational Structural Dynamics	Prof. Manish Shrikhande	12 Weeks	https://online.vtu.ac.in/course-details/Finite-Element-Method-And-Computational	3
2	Civil Engineering	Mechanics Of Materials	Prof. Saravanan.U	12 Weeks	https://online.vtu.ac.in/course-details/Mechanics-Of-Materials	3
3	Civil Engineering	Project Planning & Control	Prof. Koshy Varghese	8 Weeks	https://online.vtu.ac.in/course-details/project-planning-control	2
4	Civil Engineering	Principles Of Construction Management	Prof. Sudhir Misra	8 Weeks	https://online.vtu.ac.in/course-details/principles-of-construction-management	2
5	Civil Engineering	Municipal Solid Waste Management	Prof. Ajay Kalamdhad	12 Weeks	https://online.vtu.ac.in/course-details/municipal-solid-waste-management	3
6	Civil Engineering	Introduction to Multimodal Urban Transportation Systems (MUTS)	Prof. Arkopal Kishore Goswami	12 Weeks	https://online.vtu.ac.in/course-details/introduction-to-multimodal-urban-transpo	3
7	Civil Engineering	Bridge Engineering	Prof. Piyali Sengupta	12 Weeks	https://online.vtu.ac.in/course-details/bridge-engineering	3
8	Civil Engineering	Wastewater Treatment And Recycling	Prof. Manoj Kumar Tiwari	12 Weeks	https://online.vtu.ac.in/course-details/wastewater-treatment-and-recycling	3
9	Civil Engineering	Matrix Method Of Structural Analysis	Prof. Amit Shaw	8 Weeks	https://online.vtu.ac.in/course-details/matrix-method-of-structural-analysis	2
10	Civil Engineering	Integrated Waste Management For A Smart City	Prof. Biswanath Banerjee	12 Weeks	https://online.vtu.ac.in/course-details/integrated-waste-management-for-a-smart	3
11	Civil Engineering	Sustainable Engineering Concepts And Life Cycle Analysis	Prof. Brajesh Kumar Dubey	8 Weeks	https://online.vtu.ac.in/course-details/Sustainable-Engineering-Concepts-And-Lif	2
12	Civil Engineering	Sustainable Transportation Systems	Prof. Brajesh Kumar Dubey	8 Weeks	https://online.vtu.ac.in/course-details/Sustainable-Engineering-Concepts-And-Lif	2
13	Civil Engineering	Advanced Foundation Engineering	Prof. Bholu Ram Gurjar	12 Weeks	https://online.vtu.ac.in/course-details/sustainable-transportation-systems	3
14	Civil Engineering	Microwave Remote Sensing in Hydrology	Prof. Kousik Deb	12 Weeks	Link will be Updated Soon	3
			Prof. J. Indu	12 Weeks	Link will be Updated Soon	3

15	Civil Engineering	Plastic Waste Management	Prof. Brajesh Kumar Dubey	8 Weeks	Link will be Updated Soon	2
16	Civil Engineering	Remote Sensing Essentials	Prof. Arun K. Saraf	12 Weeks	Link will be Updated Soon	3
17	Civil Engineering	Modern Construction Materials	Prof. Ravindra Gettu	12 Weeks	Link will be Updated Soon	3
18	Civil Engineering	Energy Efficiency, Acoustics and Daylighting in Building	Prof. B. Bhattacharjee	12 Weeks	Link will be Updated Soon	3

EXAMINATION



A T M E
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Examination is done by VTU platform.

Exams are made available in Online Proctored.

Each course consists of 100 Marks.

- **50% is considered for Assignments.**
- **50% is considered for External Exam.**



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Thank you