AT MANIRBHAR BHARAT Swayampurna goa

Goa University

Taleigao Plateau, Goa-403 206 Tel : +91-8669609048 Email : registrar@unigoa.ac.in Website : www.unigoa.ac.in

गोंय विद्यापीठ ताळगांव पठार, गोंय -४०३ २०६ फोन : +९१-८६६९६०९०४८



(Accredited by NAAC)

Ref. No.: GU/Acad-Admissions/CAC/2025-26/44

Date: 02/07/2025

NOTIFICATION

GOA UNIVERSITY – QUALIFYING ENTRANCE TEST (GU-QET) 2025-26 ADMISSIONS TO MASTER OF ENGINERING PROGRAMMES

Applications for admission to the Masters of Engineering Programmes offered at the Affiliated Engineering Colleges for the academic year 2025-26 shall be accepted by the respective Engineering Colleges. Interested candidates are informed to visit the respective College website for details.

Sr.No.	MAST	ER OF ENGINEERING PROGRAMMES	OFFERED AT
	1)	M.E. Geotechnical Engineering	
1	2)	M.E. Structural Engineering	GOA COLLEGE OF
	3)	M.E. Industrial Engineering	ENGINEERING, FARMAGUDI, PONDA
	4)	M.E. Power & Energy Engineering	
	5)	M.E. Industrial Automation & Robotics	
	6)	M.E. Electronics Communication &	
		Instrumentation Engineering	
	7)	M.E. Computer Science & Engineering (Artificial	
		Intelligence & Machine Learning)	
	8)	M.E. Information Technology & Engineering	
2	1)	M.E. Computer Aided Structural Engineering	DON BOSCO COLLEGE OF
	2)	M.E. Data Sciences	ENGINEERING,
			FATORDA, MARGAO
3	1)	M.E. Artificial Intelligence and Data Sciences	PADRE CONCEICAO, COLLEGE
			OF ENGINEERING, VERNA

(A) ELIGIBILITY

Students with the Bachelor of Engineering (BE) Degrees (as per **Annexure I**) are eligible to seek admission to above mentioned ME programmes, provided they have 50% marks in Bachelor's Degree (45% marks in case of candidates belonging to SC/ST/OBC-NCL) or equivalent CGPA (as per AICTE Handbook 2024-27) **WITHOUT** the Goa University - Qualifying Entrance Test (GU-QET). The merit list will be based on candidates with GATE score followed by candidates with total marks from Sem V to VIII or equivalent CGPA. Candidates who have qualified GATE (valid score) shall be given preference. The merit list for non-GATE candidates shall be prepared based on Sem V to VIII marks or equivalent CGPA. Seats remaining vacant shall be offered to candidates from other Disciplines.

(B) ELIGIBITY FOR GOA UNIVERSITY-QUALIFYING ENTRANCE TEST

(1) Candidates who have completed 4-year UG Programme in Engineering or 3-year UG and 2-year PG programme or 5-year Integrated programme (UG+PG) in Science-Technology-Engineering-Mathematics (STEM) Programmes shall be eligible for admission to Master of Engineering Programmes in other discipline provided the candidate qualifies in the Goa University - Qualifying Entrance Test (GU-QET), as per the Curriculum & Credit Framework for Postgraduate Programme of University Grants Commission.

- (2) Eligibility of 50% marks in Bachelor's degree or Master's degree (45% marks in case of candidates belonging to SC/ST OBC (NCL) category) or equivalent CGPA are eligible to take the GU-QET.
- (3) Merit list for such candidates shall be prepared based on marks obtained in the GU-QET. If more than one candidate has the same score in GU-QET, then candidate having higher total marks/CGPA in Master's Degree (MSc (Sem I-IV)) /BE (Sem V to VIII) will be considered for admission against the vacant seats available, if any, after students from the merit lists of programmes mentioned in SI. No. (A) are given admission.

(C) ADMISSION

- (i) Candidates shall refer to the respective college website or contact college administration. Application fees for admission, if any, to be paid to the respective college.
- (ii) The GU-QET fees for candidates eligible under Sl.No. (B) is as follows, and to be paid to the respective colleges at the time of submission of applications:
 - INR 750 in case Un-reserved/ EWS/OBC * per subject/specialization.
 - INR 375 in case of SC/ST of Goa. * per subject/specialization.
 - No fees shall be charged from Persons with Disability.

*Candidates applying for admission under these categories shall be required to submit a valid certificate to that effect issued by the Officer of the rank of the Deputy Collector or any other authorized Officer as notified by the Government of Goa.

- (iii) Candidates shall be permitted to apply for a maximum of TWO programmes for GU- QET.
- (iv) The GU-QET shall be for a duration of TWO hours. The question paper shall be of 100 marks. The question paper pattern shall be Multiple Choice Question (MCQ) type. There shall be no NEGATIVE marking. The minimum qualifying marks is 40 marks. The syllabus for GU-QET is given at Annexure-II.

Sr. No	Name of Programme	Intake
1)	M.E. in Geotechnical Engineering	
2)	M.E. in Structural Engineering	
3)	M.E. in Industrial Engineering	
4)	M.E. in Power & Energy Engineering	18
5)	M.E. in Electronics Communication & Instrumentation Engineering	
6)	M.E. Industrial Automation & Robotics	18
7)	M.E. Computer Science & Engineering (Artificial Intelligence & Machine Learning)	
8)	M.E. Information Technology & Engineering	18
9)	M.E. Data Sciences	18
10)	M.E. Computer Aided Structural Engineering	
11)	M.E. Artificial Intelligence and Data Sciences	18
	TOTAL NUMBER OF SEATS	201

(D) SEAT MATRIX

Reservation of seats for admission to the various Programmes of study shall be on the basis of the Reservation Policy of the Goa State Government.

(E) DURATION OF THE PROGRAMME

The duration of the above programmes shall be for TWO years. However, students registered as per University curriculum (either for all the courses of that semester or part of them and hence take longer time to complete the programme) it is a regular Programme with a duration of THREE years. The college authorities reserve the right to provide either or both options depending on the faculty and infrastructure availability.

Application schedule (At respective Engineering Colleges)	3 rd July 2025 to 15 th July 2025
Goa University - Qualifying Entrance Test (GU-QET) Schedule	25 th July 2025 & 26 th July 2025
Announcement of GU-QET Results	31 st July 2025
Display of Merit list for candidates who are eligible for admission without GU-QET to relevant programs (At respective Engineering Colleges)	04 th August 2025
Admission schedule for candidates who are eligible for admission without GU-QET to relevant programs (At respective Engineering Colleges)	05 th August 2025
Display of Merit list for candidates who are eligible for admission with GU-QET to relevant programs (based on availability of seats)	07 th August 2025
Admission schedule for candidates with qualifying marks at GU-QET to relevant programs (At respective Engineering Colleges)	8 th August 2025
Last date for Cancellation of Seats with Full Refund as per AICTE	11 th August 2025

In case of queries, the candidates may contact the respective Colleges.

Sd/-(Prof. S. N. Dhuri) REGISTRAR

Copy: to

- 1. Principal of all Affiliated Colleges
- 2. Director, DTE
- 3. AR to VC's Secretariat
- 4. PA to Registrar

ANNEXURE-I

- (A) Candidates with the following Bachelor of Engineering degree are permitted to take admission without GU-QET for M.E. in Structural Engineering, M.E. in Computer Aided Structural Engineering and M.E. in Geotechnical Engineering.
 - 1. Building and Construction Technology
 - 2. Civil and Rural Engineering
 - 3. Civil Engineering
 - 4. Civil Engineering with Computer Application
 - 5. Civil Engineering and Planning
 - 6. Structural Engineering
 - 7. Civil Environmental Engineering
 - 8. Civil Engineering (Construction Technology)
 - 9. Civil and Infrastructure Engineering
 - 10. Civil Technology
 - 11. Civil Engineering (Public Health Engineering)
 - 12. Environmental Planning
 - 13. Construction Automation
 - 14. Construction Engineering
 - 15. Construction Engineering and Management
 - 16. Construction Technology
 - 17. Construction Technology and Management
 - 18. Geospatial Technology and Geoinformatics
 - 19. Geo Informatics
 - 20. Environment Engineering
 - 21. Civil and Environmental Engineering
 - 22. Civil Engineering (Environmental Engineering)
 - 23. Civil Engineering Environment and Pollution Control
 - 24. Environment Engineering
 - 25. Environmental Engineering
 - 26. Energy and Environmental Management
 - 27. Environmental Science and Engineering
 - 28. Environmental Science and Technology
 - 29. Civil Engineering (Environmental Engineering)
 - 30. Civil and Water Management Engineering
- (B) Candidates with the following Bachelor of Engineering degree are permitted to take admission without GU-QET for M.E. Computer Science and Engineering (Artificial Intelligence and Machine Learning); M.E.in Data Science; M.E.in Artificial Intelligence and Data Science; M.E in Information Technology and Engineering.
 - 1. Artificial Intelligence (AI) and Data Science
 - 2. Artificial Intelligence and Machine Learning
 - 3. Computer and Communication Engineering
 - 4. Computer Science and Applied Mathematics
 - 5. Computer Engineering
 - 6. Computer Engineering (Software Engineering)
 - 7. Computer Engineering and Application
 - 8. Computer Science and Biosciences
 - 9. Computer Science and Design
 - 10. Computer Networking

- 11. Computer Science and Engineering
- 12. Computer Science and Social Sciences
- 13. Cyber Physical Systems
- 14. Computer Science
- 15. Computer Science and Business Systems
- 16. Computer Science and Engineering (Internet of Things and Cyber Security Including Block Chain Technology)
- 17. Computer Science and Medical Engineering
- 18. Computer Science and Technology
- 19. Robotics and Artificial Intelligence
- 20. Computer Science and Systems Engineering
- 21. 3-D Animation and Graphics
- 22. Advanced Computer Application
- 23. Computer Science and Engineering (Internet of Things)
- 24. Computer Science and Engineering and Business Systems
- 25. Computer Science and Information Technology
- 26. Computer Science and Engineering (Artificial Intelligence and Machine Learning)
- 27. Computer Science and Engineering (Cyber Security)
- 28. Computer Science and Engineering (Networks)
- 29. Computer Science and Engineering (Data Science)
- 30. Computer Science and Engineering (Artificial Intelligence)
- 31. Computer Technology
- 32. Computing in Computing
- 33. Computing in Multimedia
- 34. Computing in Software
- 35. Electrical and Computer Engineering
- 36. Electronics and Computer Science
- 37. Electronics and Computer Engineering
- 38. Mathematics and Computing
- 39. Software Engineering
- 40. Information and Communication Technology
- 41. Information Engineering
- 42. Information Science and Engineering
- 43. Information Science and Technology
- 44. Information Technology
- 45. Information Technology and Engineering
- (C) Candidates with the following Bachelor of Engineering degree are permitted to take admission without GU-QET for M.E.in Power and Energy Engineering
 - 1. Electrical and Electronics (Power System)
 - 2. Electrical and Electronics Engineering
 - 3. Electrical and instrumentation Engineering
 - 4. Electrical and Power Engineering
 - 5. Electrical Engineering
 - 6. Electrical Engineering (Electronics and Power)
 - 7. Electrical instrumentation and Control Engineering

- 8. Electrical Power Engineering
- 9. Electrical, Electronics and Power Engineering
- 10. Electronics Engineering
- 11. Electronic Instrumentation and Control Engineering
- 12. Electronic Science and Engineering
- 13. Electronics and Computer Science
- 14. Electronics and Control Systems
- 15. Electronics and Electrical Engineering
- 16. Electronics and Instrumentation Engineering
- 17. Electronics Engineering (VLSI Design and Technology)
- 18. Electronics Instrument and Control
- 19. Electronics Instrumentation and Control Engineering
- 20. Electronics System Engineering
- 21. Electronics Technology
- (D) Candidates with the following Bachelor of Engineering degree are permitted to take admission without GU-QET to M.E.in Industrial Automation and Robotics; M.E.in Electronics Communication and Instrumentation
 - 1. Electrical and Computer Engineering
 - 2. Electrical and Electronics (Power System)
 - 3. Electrical and Electronics Engineering
 - 4. Electrical and instrumentation Engineering
 - 5. Electrical and Power Engineering
 - 6. Electrical Engineering
 - 7. Electrical Engineering (Electronics and Power)
 - 8. Electrical instrumentation and Control Engineering
 - 9. Electrical Power Engineering
 - 10. Electrical, Electronics and Power Engineering
 - 11. Electronic Engineering
 - 12. Electronic Instrumentation and Control Engineering
 - 13. Electronic Science and Engineering
 - 14. Electronics and Biomedical Engineering
 - 15. Electronics and Communication (Communication System Engineering)
 - 16. Electronics and Communication Engineering (Advanced Communication Technology)
 - 17. Electronics and Communication Engineering (VLSI Design & Technology)
 - 18. Electronics and Communication Engineering
 - 19. Electronics and Communication Engineering (Bio-Medical Engineering) Electronics and Communication Engineering (Microwaves)
 - (D) Candidates with the following Bachelor of Engineering degree are permitted to take admission without GU-QET to M.E.in Industrial Engineering
 - 1. Industrial and Production Engineering
 - 2. Industrial Engineering
 - 3. Industrial Engineering and Management
 - 4. Industrial Production Engineering
 - 5. Logistics & Supply Chain Management
 - 6. Manufacturing Engineering
 - 7. Manufacturing Engineering and Technology
 - 8. Manufacturing Process and Automation Engineering
 - 9. Manufacturing Science and Engineering
 - 10. Manufacturing Technology

- 11. Mechanical and Automation Engineering
- 12. Mechanical and Mechatronics Engineering (Additive Manufacturing)
- 13. Mechanical and Rail Engineering
- 14. Mechanical and Smart Manufacturing
- 15. Mechanical Engineering
- 16. Mechanical Engineering (Automobile)
- 17. Mechanical Engineering (Manufacturing Engineering)
- 18. Mechanical Engineering (Production)
- 19. Mechanical Engineering (Welding Technology)
- 20. Mechanical Engineering Design
- 21. Production and industrial Engineering
- 22. Production Engineering

ANNEXURE-II SYLLABUS FOR GU-QET

(A) Syllabus for the Goa University- Qualifying Entrance Test GU-QET (Civil Engineering) for the following ME programmes

- M.E. in Structural Engineering
- M.E. in Computer Aided Structural Engineering
- M.E. in Geotechnical Engineering

Equilibrium of Forces, Analysis of trusses by method of joints and method of sections, Simple lifting machines – Calculation of mechanical advantage, Velocity ratio and efficiency, determination of deflection of beam by using Macaulay's method, Moment Area method and Conjugate beam method, Shear force & bending moment diagrams for various types of beams and loadings – determination of point of zero shear, points of contraflexure and maximum bending moment, direct & bending stresses, stresses in an element, principal stresses and planes; degree of indeterminancy, Analysis of beams and frames by using Moment Distribution, Slope Deflection methods, Kani's method and matrix methods, Various types of loads on structures, Properties of Concrete, mix design, concrete composition and admixtures; Limit state theory of RC design Design of reinforced Concrete, beams, columns, slabs, footings, Prestressed Concrete members; Steel Structures, tension, compression and flexural members, bolted and welded connections, Three phase relationships of soil, Index properties of soils, shear strength of Soils, permeability and seepage, Flow net, compaction, consolidation, Boussinesq and westergaard theory of stress distribution in soils, Stress distribution on a horizontal and vertical plane in soils, pressure bulb, Concept of Effective stress and pore pressure in soils, bearing capacity definitions, estimation of bearing capacity by Terzaghi's, Meyerhof's and IS method, Estimation of earth pressure, Estimation of settlement of soils; Types of shallow and deep foundations, proportioning of shallow foundations, estimation of load carrying capacity of single pile and pile groups, Ground Improvement Techniques for weak soils, stability analysis of finite and infinite slopes.

(B) Syllabus for the Goa University- Qualifying Entrance Test GU-QET (Computer and Information Technology) for the following ME programmes

- M.E. Computer Science and Engineering (Artificial Intelligence and Machine Learning);
- M.E.in Data Science;
- M.E.in Artificial Intelligence and Data Science;
- M.E in Information Technology and Engineering.

Programming in C: Data Types, variables, constants, operators, expressions, input and output, Decision making and branching, and Arrays. Digital Electronics: Decimal, binary, octal, hex number systems and their inter conversions, Binary arithmetic, Introduction to BCD codes, Gray codes, Excess-3 codes & ASCII codes, Basic Gates-NOT, OR, AND, Universal Logic Gates-NOR, NAND, Combinational Logic Circuits, Boolean Laws and Theorems, Reducing Boolean Expressions, Converting AOI to NAND/NOR Logic. Operating Systems: Operating System Structure, Operating System Services, Types of System calls. Process scheduling, Inter-process communication. Multithreading models, Threading issues. CPU Scheduling Algorithms: FCFS, SJF, SRTF / SRTN, Priority Scheduling, Round Robin Scheduling. Computer Networks: The OSI and TCP/IP Reference Models. Theoretical Basis for Data Communication. The Maximum Data Rate of a Channel. Data Link Layer Design Issues, Framing, Error Control, Flow Control Error-Correcting Codes, Error –Detecting Codes. Sliding Window protocol.

(C) Syllabus for the Goa University- Qualifying Entrance Test GU-QET (Electrical and Electronics Engineering) for the following ME program

• M.E.in Power and Energy Engineering

Electrical & Electronic Circuits: Kirchhoff's voltage & current laws (KCL, KVL), Node and Mesh analysis; Network Theorems: Thevenin's, Norton's, Superposition and Maximum Power Transfer theorem. Simple diode circuits: clipping, clamping, rectifiers; Amplifiers: biasing. Electrical Machines: Single phase transformer: equivalent circuit, phasor diagram, open circuit and short circuit tests, regulation and efficiency; Three-phase transformers: connections, vector groups, parallel operation; Three-phase induction machines: principle of operation, types , performance, torgue-speed characteristics, no-load and blocked-rotor tests, equivalent circuit, starting and speed control; Operating principle of singlephase induction motors; Synchronous machines: cylindrical and salient pole machines, performance and characteristics, regulation and parallel operation of generators, starting of synchronous motors; Types of losses and efficiency calculations of electric machines. Power Systems-Basic concepts of electrical power generation, ac and dc transmission concepts, Models and performance of transmission lines and cables. Symmetrical and unsymmetrical fault analysis, Principles of over-current, differential, directional and distance protection; Circuit breakers, System stability concepts. Control System: Mathematical modelling and representation of systems, Feedback principle, transfer function, Block diagrams and Signal flow graphs Power Electronics- Static V-I characteristics and firing/gating circuits for Thyristor, MOSFET, IGBT, DC to DC conversion: Buck, Boost and Buck-Boost Converters, Singlephase and three-phase voltage and current source inverters, sinusoidal pulse width modulation.

(D) Syllabus for the Goa University- Qualifying Entrance Test GU-QET (Electronics and Telecommunication Engineering) for the following ME programmes

- M.E.in Industrial Automation and Robotics
- M.E.in Electronics Communication and Instrumentation Engineering

Engineering Mathematics: Linear Algebra: Vector space, basis, linear dependence and independence, matrix algebra, Eigenvalues and eigenvectors, rank, solution of linear equations- existence and uniqueness; Signals and Systems: Continuous-time signals: Fourier series and Fourier transform, sampling theorem and applications. Discrete-time signals: DTFT, DFT, z-transform, discrete-time processing of continuous-time signals. LTI systems: definition and properties, causality, stability, impulse response, convolution, poles and zeroes, frequency response, group delay, phase delay. Digital Circuits: Number representations: binary, integer and floating-pointnumbers. Combinatorial circuits: Boolean algebra, minimization of functions using Boolean identities and Karnaugh map, logic gates and their static CMOS implementations, arithmetic circuits, code converters, multiplexers, decoders. Sequential circuits: latches and flip-flops, counters, shift-registers, finite state machines, propagation delay, setup and hold time, critical path delay. Data converters: sample and hold circuits, ADCs and DACs. Control Systems: Basic control system components; Feedback principle; Transfer function; Block diagram representation; Signal flow graph; Transient and steady-state analysis of LTI systems; Frequency response; Routh-Hurwitz and Nyquist stability criteria; Bode and root-locus plots; Lag, lead and lag-lead compensation; State variable model and solution of state equation of LTI systems. Analog communications: amplitude modulation and demodulation, angle modulation and demodulation, spectra of AM and FM, super heterodyne receivers. Digital communications: PCM, DPCM, digital modulation schemes (ASK, PSK, FSK, QAM), bandwidth.

(E) Syllabus for the Goa University- Qualifying Entrance Test GU-QET (Mechanical Engineering) for the following ME programme

• M.E.in Industrial Engineering

Introduction to manufacturing processes: Sheet metal forming, Sheet metal cutting, Metal joining processes. Linear Measurement: Vernier Instruments, Micrometer Instruments and Slip gauges. Angular Measurement: Sine Bar Probability Preliminary: Introduction to Probability, definition, Sample Space, Events, Conditional Probability, Theorem on total probability, Random Variable: Introduction, Discrete and Continuous, Characteristics-Mean and Variance. Probability distributions:

Bernoulli trial, Binomial, Geometric, Exponential and Normal – Probability law, mean and variance. Concept of Productivity, Production vs Productivity, Productivity Measures, Work Study, Method Study, Procedure of Method Study, Work Measurement, Work Measurement Techniques (Work Sampling, Time Study), Wages and Incentives. Plant layout (Process layout and product layout) Forecasting, Project scheduling (CPM), Inventory, ABC analysis, Basic EOQ model, Assembly line balancing, Sequencing and scheduling. Management theories, Manager V/S Leader, Organisation, Organisational structure, Span of control, Authority Responsibility and Delegation, Leadership, Leadership styles, Motivation, Maslow's Theory of Motivation, Communication, Communication process model.