

Schedule for Interviews for Assistant Professors (on Contract)

Name of NIT: NIT, TRICHY

SCHEDULE

Sl. No.	Department/Group	Date/(s)	Time
1.	Civil Engg.	11 th December 2017	From 8.00 a.m. onwards
2.	Geology (Applied Geology & Geology)	11 th December 2017	From 10.00 a.m. onwards
3.	Mechanical Engg. (Automobile Engg. & Mechanical Engineering)	11 th December 2017	From 8.00 a.m. onwards
4.	Electrical & Electronics Engg. (Electrical & Electronics Engg. & Electrical Engg.)	11 th December 2017	From 8.00 a.m. onwards
5.	Physics	11 th December 2017	From 8.00 a.m. onwards
6.	Chemistry	11 th December 2017	From 9.00 a.m. onwards
7.	Instrumentation & Control (Bio Medical Engg. & Electronics & Instrumentation Engg.)	11 th December 2017	From 10.00 a.m. onwards
8.	Mathematics	12 th December 2017	From 8.00 a.m. onwards
9.	Production Engineering (Production Engg. & Industrial and Production Engg.)	12 th December 2017	From 9.00 a.m. onwards
10.	Computer Science Engineering (computer Science Engg. & Information Technology)	12 th December 2017	From 8.00 a.m. onwards
11.	Electronics and Communication Engineering (Electronics & Telecommunication / Communication Engg. & Electronics Engg.)	12 th December 2017	From 8.00 a.m. onwards
12.	English	12 th December 2017	From 8.00 a.m. onwards
13.	Metallurgy	12 th December 2017	From 9.00 a.m. onwards
14.	Chemical Engineering (Chemical Engg. & Bio-Tech. Engg.)	12 th December 2017	From 8.00 a.m. onwards
15.	Food Technology	Will be conducted by Video Conferencing on the date & time allotted by VNIT, Nagpur.	

(Dr. M. Udayakumar)
Coordinator, TEQIP-III

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI – 620 015
TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME –II

INSTRUCTION TO CANDIDATES

Candidates are advised to report at the concerned Departments of NIT Trichy at the time and date given in schedule.

1. The candidate must produce all the original certificates in respect of educational qualification (UG, PG, Ph.D), proof for age (school leaving or 10th standard certificate), GATE score, NET/SET, relevant experience, Aadhar card, PAN card etc. for verification.
2. Candidates coming without original certificates will not be permitted for appearing in the interview.
3. Candidates are advised to take printout of (PDF) applications filled-in along with self-attested copies of original certificates.
4. No TA/DA is admissible to the candidates for appearing in the interview.
5. For teaching demonstration candidate shall choose a topic among the pool of topics available in the NIT Trichy website and make a presentation for 15 minutes. The selection committee will assess each candidate for the following:
 - Content of presentation/demonstration
 - Teaching skills
 - Depth of subject knowledge
 - Responsiveness & overall Impact
6. Limited accommodation is available in the student hostels (sharing basis) on payment for one day stay. The candidate may send a request for accommodation by mail to teqip@nitt.edu on or before 04.12.2017.
7. HOW TO REACH NITT?
NIT - T is located on the Tiruchirappalli - Tanjore Highway (NH - 67) about 23 kms from Trichy Railway station. One can avail Bus No.128 or Tanjore bound buses from the Central Bus Stand (CBS) to reach NIT. Town buses are also available from Chatram city bus stand.

(Dr. M. Udayakumar)
Coordinator, TEQIP-III

TEQIP-III PROJECT

Selection of Assistant Professors for TEQIP institutions

DEPARTMENT/GROUP : CIVIL ENGINEERING

SCHEDULE OF INTERVIEW

DATE : 11th December 2017

TIME : 8.00 a.m. onwards

VENUE : DEPARTMENT OF CIVIL ENGINEERING, NIT, TRICHY

TOPICS FOR PPT PRESENTATION

1. Analysis of Indeterminate Structures by any one Classical Method.
2. Major and Minor Principle stresses in a rectangular plate subjected to bi-axial in-plane load
3. Reinforced Concrete Design of Doubly Reinforced Beams as per IS456
4. Design of Laterally restrained and unrestrained steel beams as per IS800-2007
5. Concrete Mix Design
6. Various Methods of assessing safe bearing capacity of soil for foundation design
7. Flow through Channel & Pipes
8. Sewerage collection system and treatment units to meet the Indian standards and WHO
9. Water distribution system from source to end user including all treatment units.
10. Design of State / National highways and their components.

TEQIP-III PROJECT

Selection of Assistant Professors for TEQIP institutions

**DEPARTMENT/GROUP : ELECTRONICS AND COMMUNICATION ENGINEERING
(Electronics & Telecommunication/Communication Engg.
/Electronics Engg.)**

SCHEDULE OF INTERVIEW

DATE : 12th December 2017

TIME : 8.00 a.m. onwards

VENUE : ECE DEPARTMENT (ADMN. BLOCK, II FLOOR), NIT, TRICHY

TOPICS FOR PPT PRESENTATION

1. Devices and Electronic Circuits,
2. Network Analysis and Synthesis,
3. Signals & Systems,DSP,ADSP,
4. Electromagnetic Theory,
5. Transmission lines,
6. Antennas and Wave Propagations,
7. MIC,
8. Microwave electronics,
9. Microwave Components and Circuits, 10. Statistical theory of Communication,
11. Analog and Digital Communication,
12. Wireless Communication,
13. Broadband Access Technologies,
14. Fiber optics and Optical communication,
15. Satellite Communication,
16. Digital Systems,
17. Analog Integrated Circuits,
18. Microprocessors,
19. Microcontrollers,
20. Embedded systems,
21. ARM system,
22. DSP Processors,
23. Basics of VLSI,
24. Digital VLSI,
25. Analog IC Design,
26. Verilog HDL,
27. ASIC,
28. DSP for VLSI,
29. EDA Tools,
30. Computer Networks and Protocols,
31. Computer Architecture and Organization,
32. DIP.

TEQIP-III PROJECT

Selection of Assistant Professors for TEQIP institutions

**DEPARTMENT/GROUP : ELECTRICAL AND ELECTRONICS ENGINEERING
(Electrical & Electronics Engg. /Electrical Engg.)**

SCHEDULE OF INTERVIEW

DATE : 11th December 2017

TIME : 8.00 a.m. onwards

VENUE : EEE DEPARTMENT, NIT, TRICHY

TOPICS FOR PPT PRESENTATION

1. Power Systems
2. Power Electronics
3. DC Machines
4. AC Machines
5. Special Electric Machines
6. Control Systems
7. Electronic Circuits
8. Computer Science topics
9. Instrumentation
10. Measurements

TEQIP-III PROJECT

Selection of Assistant Professors for TEQIP institutions

**DEPARTMENT/GROUP : COMPUTER SCIENCE AND ENGINEERING
(Computer Science Engineering /Information Technology)**

SCHEDULE OF INTERVIEW

DATE : 12th December 2017

TIME : 8.00 a.m. onwards

VENUE : CSE DEPARTMENT, NIT, TRICHY

TOPICS FOR PPT PRESENTATION

1. Data Structures and Algorithms
2. Operating Systems
3. Computer Organization and Architecture
4. Principles of Programming Languages
5. Microprocessors
6. Computer Networks
7. Database Management systems
8. Automata and Formal Languages
9. Compiler Design
10. Software Engineering

TEQIP-III PROJECT

Selection of Assistant Professors for TEQIP institutions

**DEPARTMENT/GROUP : MECHANICAL ENGINEERING
(Automobile Engg. /Mechanical Engg.)**

SCHEDULE OF INTERVIEW

DATE : 11th December 2017

TIME : 8.00 a.m. onwards

VENUE : DEPARTMENT OF MECHANICAL ENGINEERING, NIT, TRICHY

TOPICS FOR PPT PRESENTATION

1. Fluid Mechanics
2. Strength of Materials
3. Machine Design
4. Theory of Machines
5. Thermal Engineering (Thermodynamics, Heat transfer, R&A/C etc)
6. Production Technology
7. Engineering Mechanics
8. CAD/CAM
9. Renewable Energy
10. Metallurgy and Material Science

TEQIP-III PROJECT

Selection of Assistant Professors for TEQIP institutions

DEPARTMENT/GROUP : PHYSICS

SCHEDULE OF INTERVIEW

DATE : 11th December 2017

TIME : 8.00 a.m. onwards

VENUE : DEPARTMENT OF PHYSICS, NIT, TRICHY

TOPICS FOR PPT PRESENTATION

- 1) Non- Destructive Technology
- 2) Nanotechnology
- 3) Thin film Technology
- 4) Photonics
- 5) Sensors
- 6) Material Science
- 7) Energy storages
- 8) Water purification
- 9) Photovoltaics
- 10) Water pollution

TEQIP-III PROJECT

Selection of Assistant Professors for TEQIP institutions

DEPARTMENT/GROUP : MATHEMATICS

SCHEDULE OF INTERVIEW

DATE : 12th December 2017

TIME : 8.00 a.m. onwards

VENUE : DEPARTMENT OF MATHEMATICS, NIT, TRICHY

TOPICS FOR PPT PRESENTATION

1. Algebra
2. Matrix
3. Calculus
4. Differential Equations
5. Partial Differential Equations
6. Real Analysis
7. Complex Analysis
8. Complex Integration
9. Integral Transforms
10. Numerical Methods
11. Fourier Series
12. Probability and Statistics.

TEQIP-III PROJECT

Selection of Assistant Professors for TEQIP institutions

**DEPARTMENT/GROUP : PRODUCTION ENGINEERING
(Production Engg. /Industrial & Production Engg.)**

Schedule of Interview

DATE : 12th December 2017

TIME : 9.00 a.m. onwards

VENUE : DEPARTMENT OF PRODUCTION ENGINEERING, NIT, TRICHY

TOPICS FOR PPT PRESENTATION

1. CAD/CAM/CIM
2. Robotics/ Mechatronics
3. Rapid Prototyping/Rapid Manufacturing
4. FMS
5. Casting and Welding
6. Metal Forming Technology
7. Machine Tools and Tool Engineering
8. Micromachining
9. Material Handling Systems
10. Non-traditional Manufacturing
11. Quality and Reliability Engineering
12. Supply Chain Management
13. Operations Management
14. System Analysis and Industrial Engineering
15. Product Development and Design

TEQIP-III PROJECT

Selection of Assistant Professors for TEQIP institutions

DEPARTMENT/GROUP : METALLURGY

SCHEDULE OF INTERVIEW

DATE : 12th December 2017

TIME : 9.00 a.m. onwards

VENUE : DEPARTMENT OF METALLURGICAL & MATERIALS ENGINEERING, NIT, TRICHY

TOPICS FOR PPT PRESENTATION

1. Metal Joining
2. Metal forming
3. Metal Casting
4. Heat treatment
5. Surface Modification Techniques
6. Extraction of Metals
7. Aluminium Alloys
8. Non-Metallic materials
9. Ladle Metallurgy
10. Corrosion of Metals

TEQIP-III PROJECT

Selection of Assistant Professors for TEQIP institutions

DEPARTMENT/GROUP : ENGLISH

SCHEDULE OF INTERVIEW

DATE : 12th December 2017

TIME : 8.00 a.m. onwards

VENUE : DEPARTMENT OF HUMANITIES (Lyceum Building II Floor), NIT, TRICHY

TOPICS FOR PPT PRESENTATION

1. The book that I like the most.
2. A Leader who inspired me.
3. Benefits of effective Communication.
4. Use of technology in the class room.
5. A Literary movement.
6. Translation.
7. English can also be taught through the mother tongue
8. Ways to improve reading habit.
9. English as a Global Language.
10. My area of Research.
11. Teaching of English in India.
12. Effective ways of teaching a Poem.

TEQIP-III PROJECT

Selection of Assistant Professors for TEQIP institutions

DEPARTMENT/GROUP : CHEMISTRY

SCHEDULE OF INTERVIEW

DATE : 11th December 2017

TIME : 9.00 a.m. onwards

VENUE : DEPARTMENT OF CHEMISTRY, NIT, TRICHY

TOPICS FOR PPT PRESENTATION

1. Boiler feed water- Troubles and remedial measures
2. Hardness of water - EDTA determination
3. Concentration electro chemical cells - with and without transference
4. Phase rule equilibrium, applicability to 2 and 3 component systems
5. Gibbs-Helmholtz equation and its applications
6. Entropy changes associated with different processes
7. Mechanism of Polymerization with examples
8. Molecular weight determination of polymers
9. Mechanisms of lubrication
10. Calorific value determination of fuel and its significance.

TEQIP-III PROJECT

Selection of Assistant Professors for TEQIP institutions

**DEPARTMENT/GROUP : INSTRUMENTATION & CONTROL ENGINEERING
(Bio Medical Engg. /Electronics & Instrumentation
Engg.)**

SCHEDULE OF INTERVIEW

DATE : 11th December 2017

TIME : 10.00 a.m. onwards

VENUE : DEPARTMENT OF INSTRUMENTATION & CONTROL ENGINEERING, NIT, TRICHY

TOPICS FOR PPT PRESENTATION

1. Sensors and Transducers
2. Industrial Instrumentation
3. Embedded system
4. Control System
5. Biomedical Instrumentation
6. Energy Harvesting
7. DCS/ Network Control System
8. Internet of things system Design
9. Optical Instrumentation
10. Micro and Nano Sensors

TEQIP-III PROJECT

Selection of Assistant Professors for TEQIP institutions

DEPARTMENT/GROUP : GEOLOGY

Schedule of Interview

DATE : 11th December 2017

TIME : 10.00 a.m. onwards

VENUE : TEQIP OFFICE (ADMN. BLOCK), NIT, TRICHY

TOPICS FOR PPT PRESENTATION

1. Structure and Tectonics of Tamil Nadu
2. Mineral wealth of Tamil Nadu
3. Geospatial technology and its application
4. Geology of Tamil Nadu from Achaean to Recent time
5. Mineral exploration methods
6. Role of Geology in Civil Engineering
7. Groundwater management with reference to Tamil Nadu
8. Natural disasters mapping and management
9. Origin and classification of igneous rocks
10. Instrumentation and analytical techniques in geology

TEQIP-III PROJECT

Selection of Assistant Professors for TEQIP institutions

DEPARTMENT/GROUP : FOOD TECHNOLOGY

SCHEDULE OF INTERVIEW

DATE, TIME & TOPIC : Will be displayed in VNIT Website by 25th November 2017

<http://www.vnit.ac.in/index.php/16-news/453-advertisement-for-assistant-professor-under-npiu-teqip-iii-project>

VENUE : Lecture Hall Complex (LH-9), NIT, TRICHY

TEQIP-III PROJECT

Selection of Assistant Professors for TEQIP institutions

**DEPARTMENT/GROUP : CHEMICAL ENGINEERING
(Chemical Engg. /Bio-Technology Engg.)**

SCHEDULE OF INTERVIEW

DATE : 12th December 2017

TIME : 8.00 a.m. onwards

VENUE : DEPARTMENT OF CHEMICAL ENGINEERING, NIT, TRICHY

TOPICS FOR PPT PRESENTATION

1. FLUID MEACHNICS
2. HEAT TRANSFER
3. ABSORPTION, HUMIDIFICATION AND ADSORPTION
4. DISTILLATION, EXTRACTION AND LEACHING
5. HOMOGENEOUS REACTION AND REACTOR DESIGN
6. HETROGENEOUS REACTION AND REACTOR DESIGN
7. PROCESS DYNAMICS AND CONTROL
8. THERMODYNAMICS
9. BIOCHEMICAL ENGINEERING
10. CHEMICAL PROCESS DESIGN