



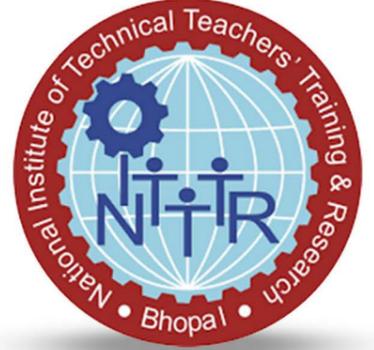
SWAYAM

January 2026

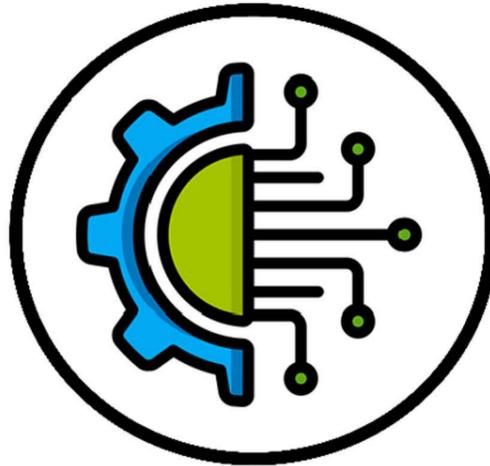
COURSES OFFERED UNDER
TEACHER EDUCATION

**NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING
AND RESEARCH**

Institution Deemed to be University under Distinct Category,
A Centrally Funded Technical Institute Ministry of Education,
Government of India, Taramani, Chennai - 600113



NITTTR offers the courses in the following clusters



Engineering and Technology

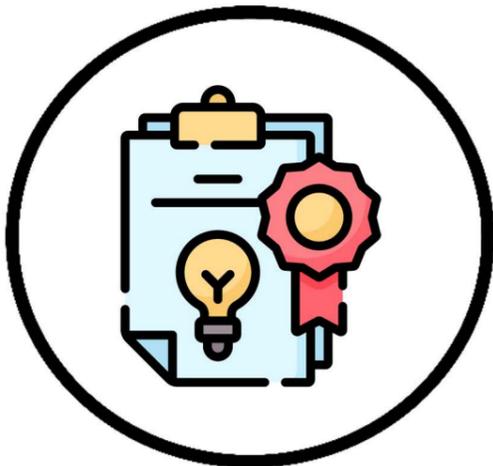
Leadership, Policy and Accreditation



Entrepreneurship and Business Management



Education and Instructional Methods



Legal and Intellectual Property



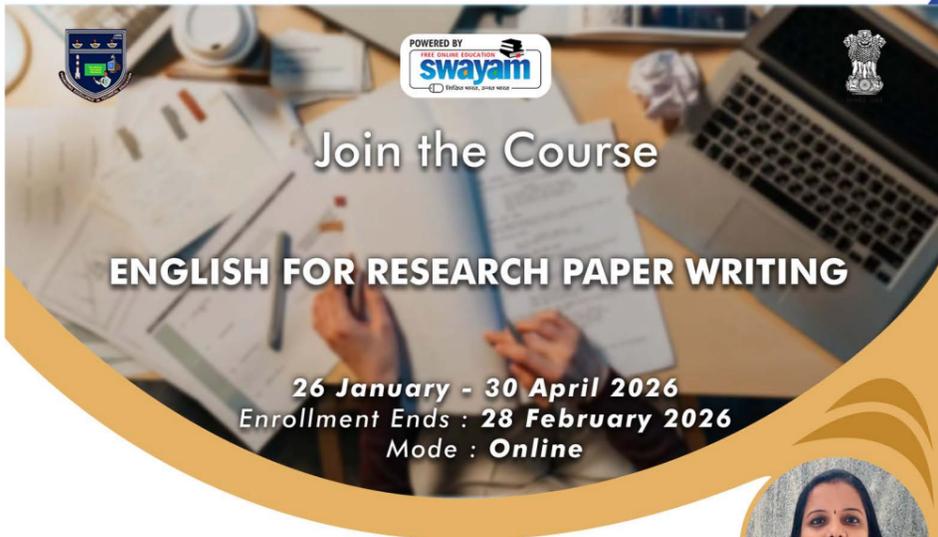
Communication, Skills and Knowledge Systems



Technical Training in Vernacular Language



Communication, Skills and Knowledge systems






Join the Course

ENGLISH FOR RESEARCH PAPER WRITING

26 January - 30 April 2026
 Enrollment Ends : 28 February 2026
 Mode : Online



Coordinated By
Dr. K. N. Shoba
 Associate Professor, NITTR Chennai

Course Layout

- Foundations of Academic English in Research
- Effective Writing Style for Research Papers
- Advanced Reading Skills for Researchers
- Research Vocabulary Development
- Grammar Refinement for Research Writing
- Mastery in Revising, Editing, And Proofreading
- Presentation Language Skills
- Technology and Language for Research



FREE For Learning 3 Credits






Join the Course

COMMUNICATION SKILLS MODES & KNOWLEDGE

26 January - 30 April 2026
 Enrollment Ends : 28 February 2026
 Mode : Online



Coordinated By
Er. Amandeep Kaur
 Assistant Professor, NITTRR Chandigarh

Course Layout

- Classroom Communication: An Introduction
- Listening and Speaking
- Reading and Writing
- Barriers to Classroom Communication
- Active Learning
- Role of Media in classroom Communication
- Use of Board (Whiteboard/ Blackboard)
- Feedback



FREE For Learning 3 Credits






Join the Course

INDIAN KNOWLEDGE SYSTEM

26 January - 30 April 2026
 Enrollment Ends : 28 February 2026
 Mode : Online



Coordinated By
Dr. Roli Pradhan
 Assistant Professor, NITTR Bhopal

Course Layout

- History of Indian Knowledge System
- India's characteristic knowledge & India's epistemology
- Ancient Scriptures
- Ancient Education System
- Scientific approaches of IKS & Torch-bearers
- Literary Aspects of IKS & Torch-bearers
- Governance in IKS & Way Forward



FREE For Learning 3 Credits





Join the Course

GUIDANCE AND COUNSELLING

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online

Course Layout

- Overview of Guidance and Counselling
- Counselling Approaches, Theories and techniques
- Ethics, Assessment, and Institutional Practices
- Common Issues and Interventions in Institutional Settings



Coordinated By
Dr. S. Renukadevi Professor, NITTR Chennai
Er. M. Sutaarson Assistant Professor, NITTR Chennai



FREE For Learning **2 Credits**





Join the Course

EMPLOYABILITY SKILLS

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online

Course Layout

- Foundations of employability and workplace readiness.
- Communication etiquette, presentations, and interpersonal skills.
- Critical thinking, problem-solving, teamwork, and leadership.
- Digital literacy, workplace tools, ethics, and professional behaviour.
- Career readiness: résumé building, interviews, and workplace preparation.



Coordinated By
Dr. P. Jakulin Divya Mary
 Assistant Professor, NITTR Chennai



FREE For Learning **3 Credits**





Join the Course

SOFT SKILLS FOR 21ST CENTURY LEARNERS

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online

Course Layout

- Introduction to soft skills, goal setting & self-awareness – Week 1
- Communication & Presentation Skills – Week 2 & 3
- Leadership and team building – Week 4 & 5
- Time management, Stress management – Week 6
- Change management – Week 7
- Emotional intelligence, Interpersonal skills – Week 8



Coordinated By
Dr. Habiba Hussain
 Associate Professor, NITTR Kolkata



FREE For Learning **2 Credits**





Education And Instructional Methods






Join the Course

STUDENT PSYCHOLOGY

26 January - 30 April 2026
 Enrollment Ends : 28 Feb 2026
 Mode : Online



Coordinated By
Dr. S. Renukadevi
Professor, NITTR Chennai

Course Layout

- Teaching Learning Process
- Student Characteristics, Types and Problems
- Psychological Tests and Inventories
- Student Motivation
- Physical and Cognitive Development
- Emotional and Social Development
- Neuro-Linguistic Programming
- Counselling Skills and Summary



FREE For Learning 3 Credits




Join the Course

BASIC INSTRUCTIONAL METHODS

26 January - 30 April 2026
 Enrollment Ends : 28 February 2026
 Mode : Online



Coordinated By
Dr. Susan S. Mathew
Associate Professor, NITTR Bhopal

Course Layout

- Overview of Learning and Instruction
- Teacher-Centred Methods
- Instructional Methods for developing Practical Outcomes
- Student Centred Interactive methods
- Selecting Instructional Methods using Logical Approach



FREE For Learning 3 Credits




Join the Course

ADVANCED INSTRUCTIONAL METHODS

26 January - 30 April 2026
 Enrollment Ends : 28 Feb 2026
 Mode : Online



Coordinated By
Dr. Asmita A. Khajanchee
Associate Professor, NITTR Bhopal

Course Layout

- Introduction to Advanced Instructional Methods
- Small Group Methods using Creativity Techniques
- Small Group methods for higher cognitive and affective Domain
- ICT based Methods and Selection of Advanced Instructional Methods



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Join the Course

**MENTAL HEALTH OF STUDENTS IN HIGHER EDUCATION:
FOSTERING RESILIENCE AND
ENHANCING WELL-BEING**

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online



Coordinated By
Dr. S. Renukadevi
Professor, NITTR Chennai

Course Layout

- Overview of Mental Health in Higher Education
- Physical and Cognitive Well Being
- Academic Stress and Time Management
- Digital Well-being
- Emotional and Social Well Being
- Resilience, Coping and Counselling for Maladaptive Behaviours
- Support Systems and Campus resources
- Culture of Well-being in Institutions



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For Learning **3 Credits**

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FREE ONLINE EDUCATION

Join the Course

**MENTORING AND COUNSELLING SKILLS
FOR TEACHERS**

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online



Coordinated By
Dr. S. Renukadevi
Professor, NITTR Chennai

Course Layout

- Learners and Teachers
- Mentoring Basics
- Mentoring Stages & Areas
- Mentoring Strategies
- Counselling Basics
- Counselling Skills
- Counselling Strategies & Areas
- Self care for Teachers and Summary



FREE
For Learning **3 Credits**

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swayam
FREE ONLINE EDUCATION

Join the Course

EDUCATIONAL MEDIA

26 January - 30 April 2026
Enrollment Ends : 28 Feb 2026
Mode : Online



Coordinated By
Dr. Sandip Shivaji Kedar
Professor, NITTR Bhopal

Course Layout

- Educational Media - Need, Classification and Planning
- Design and Development of Educational Media
- Media for 21st Century Classroom and Laboratory



FREE
For Learning **3 Credits**

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swayam
FREE ONLINE EDUCATION

Join the Course
EDUCATIONAL VIDEO PRODUCTION

26 January - 30 April 2026
Enrollment Ends : 28 Feb 2026
Mode : **Online**

Course Layout

- Planning and Management of Script Writing, Storyboard and Video Program Production
- Lighting Techniques and Moods
- Video Camera Techniques
- Graphics and Animation Techniques
- E Content Generation Tools
- Video Editing Techniques



Coordinated By
Dr. Maitreyee Dutta
Professor, NITTR Chandigarh



FREE
For Learning **2 Credits**

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FREE ONLINE EDUCATION

Join the Course
PROFESSIONAL ETHICS FOR HIGHER EDUCATION TEACHERS

26 January - 30 April 2026
Enrollment Ends : 28 Feb 2026
Mode : **Online**

Course Layout

- Professionalism in Teaching and the Role of Higher Education Teachers
- Mentoring, counselling, and revival of the 'Guru-Shishya' Tradition
- Human values, harmony, and sustainable happiness
- Co-existence and collective well-being
- Professional ethics, values, and self-exploration
- Ethical dilemmas and academic code of conduct
- Role of professional societies in ensuring ethical practice



Coordinated By
Dr. Asmita A. Khajanchee
Associate Professor, NITTR Bhopal



FREE
For Learning **2 Credits**

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FREE ONLINE EDUCATION

Join the Course
VIRTUAL SIMULATION TOOLS BASED INTERACTIVE TEACHING AND LEARNING STRATEGY

26 January - 30 April 2026
Enrollment Ends : 28 Feb 2026
Mode : **Online**

Course Layout

- Teaching Learning Process and Instructional Strategies
- Physics Education Technology (PhET)
- MATLAB & MATLAB Simulink
- MultiSIM & LabVIEW
- Virtual Labs project, an initiative of Ministry of Education (MoE), Government of India
- Tinker CAD
- Electronic design automation (EDA) Playground & ANSYS
- Augmented Reality, Virtual Reality, Mixed Reality, Extended Reality, Meta Verse, 360 degree Video simulations



Coordinated By
Dr. G. Kulanthaivel
Professor, NITTR Chennai



FREE
For Learning **3 Credits**





Join the Course

TEACHING & LEARNING (TL) PRACTICES FOR PYTHON PROGRAMMING

26 January - 30 April 2026
 Enrollment Ends : 28 Feb 2026
 Mode : Online

Course Layout

- Structured Instruction
- Introduction to Programming and Python
- Overview lectures on programming concepts and Python fundamentals
- Data Structures
- Functions and Modules
- Coding exercises to create and use functions and modules
- Importance and Principles of Data Visualization
- Explanation of data visualization concepts and libraries through lectures



Coordinated By
Dr. V. Shanmuganeethi
NITTR Chennai



FREE For Learning 3 Credits





Join the Course

E-CONTENT DEVELOPMENT

26 January - 30 April 2026
 Enrollment Ends : 28 Feb 2026
 Mode : Online

Course Layout

- Gen Z Learners and E-Learning
- Instructional Design Models
- Multimedia Principles and Content Authoring Tools
- Presentation Tools
- Graphics and Animation Tools
- Audio and Podcasting Tools
- Online Video Creation
- FOSS and Online Tools for Engagement



Coordinated By
Dr. P. Malliga
Professor, NITTR Chennai



FREE For Learning 3 Credits





Join the Course

LMS THROUGH MOODLE

26 January - 30 April 2026
 Enrollment Ends : 28 Feb 2026
 Mode : Online

Course Layout

- Covers LMS fundamentals, learning theories, instructional technology, CMS vs LMS, and Moodle installation/configuration.
- Explains Moodle course setup, user enrollment, account management, roles, and permissions.
- Details course resources and activities—files, multimedia, assignments, quizzes, SCORM, and plugins.
- Includes assessment tools, question banks, and content import/export.
- Teaches report generation, gradebook setup, blocks, backups, site administration, server settings, and Moodle security.



Coordinated By
Dr. Shanmuganeethi
NITTR Chennai



FREE For Learning 3 Credits

Course Layout

- Introduction to engineering curriculum: definition, significance, syllabus, and design approaches.
- Curriculum development process: basic model, factors influencing changes, and characteristics of a good curriculum.
- Curriculum planning: needs identification, designing, implementation, and evaluation.
- Outcome-Based Curriculum (OBC): philosophy and model in engineering education.
- OBC details: program structure, course presentation, and assessment design.



Coordinated By

Dr. Susan S. Mathew Associate Professor, NITTR Bhopal
Dr. Chanchal Mehra Assistant Professor, NITTR Chennai



FREE For Learning 2 Credits

Course Layout

- Introduction to Artificial Intelligence in Education
- Enhancing Teaching and Pedagogical Practices with AI
- AI-Driven Student Engagement and Motivation
- Adaptive Learning and Personalized Education
- Transforming Assessment with AI
- Learning Analytics and Insights
- Collaboration and Communication with AI
- Challenges and Future Prospects



Coordinated By

Dr. V. Shanmuganeethi NITTR Chennai
Dr. S. Sasirekha NITTR Chennai



FREE For Learning 3 Credits

Course Layout

- Nature-Based Solutions: meaning, global standards, sustainability links, indigenous perspectives.
- Traditional ecological knowledge, community roles, and cultural heritage in sustainability.
- Ecosystem-based climate resilience: forests, wetlands, land use, and community adaptation.
- Traditional water, agriculture, and knowledge systems supporting conservation and NbS.
- Policies, community participation, technology integration, and future innovations in NbS.



Coordinated By

Dr. Roli Pradhan Assistant Professor, NITTR Bhopal
Dr. Amitabh Pande Director, National Museum of Humankind



FREE For Learning 4 Credits







Join the Course

AI AND OPEN SOURCE TOOLS FOR TEACHING AND LEARNING

26 Jan - 30 Apr 2026
 Enrollment Ends : 28 Feb 2026
 Mode : Online

Course Layout

- **AI in Teaching** – Basics of AI, teaching challenges, AI adoption opportunities, and open-source tools.
- **Digital Content Tools** – Flowcharts, PPTs, AR/VR, screen recording, whiteboards, and canvas tools.
- **Classroom & Evaluation Tools** – Google Workspace, collaboration platforms, analytics, surveys, grading and assessment tools.
- **Research & Academic Tools** – Referencing, citation, plagiarism checkers, research software, R Studio, Scilab/LaTeX, simulators.
- **Responsible & Future AI** – Ethical AI use, cybersecurity, virtual labs, challenges in AI adoption, and capstone activities.



Coordinated By
Dr. Meenakshi Sood Associate Professor, NITTR Chandigarh
Dr. Maitreyee Dutta Professor, NITTR Chandigarh



FREE For Learning 3 Credits







Join the Course

ICT IN TEACHING AND LEARNING

26 January - 30 April 2026
 Enrollment Ends : 28 Feb 2026
 Mode : Online

Course Layout

- ICT Enabled Teaching and Learning
- Pedagogical Integration of Appropriate Emerging ICT strategy
- Ethical- Intellectual Property Right
- Legal Issues



Coordinated By
Dr. Ravi Kapoor
 Professor, NITTR Bhopal



FREE For Learning 3 Credits







Join the Course

CREATING AND TEACHING WITH OER: AN AI-DRIVEN APPROACH

26 January - 30 April 2026
 Enrollment Ends : 28 Feb 2026
 Mode : Online

Course Layout

- OER basics, Creative Commons licensing, UNESCO and Indian initiatives.
- Discovering and attributing OER using TASL; licensing compliance.
- Localizing and remixing OER; accessibility and inclusive design.
- Four-Quadrant course planning: video, e-content, discussion, assessment; storyboarding; AI-enhanced engagement.
- Publishing, hosting, maintenance, and measuring impact with analytics for sustainability.



Coordinated By
Mr. A.P. Felix Arokiya Raj
 Assistant Professor, NITTR Chennai



FREE For Learning 2 Credits

Join the Course

**DIGITAL PEDAGOGY MEETS DATA:
VISUALIZATION SKILLS FOR EDUCATORS**

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online

Course Layout

- Foundations of Digital Pedagogy and AI-Enhanced Teaching
- Basics of Data Visualization and Data-Driven Insights
- Applications of Data Visualization in Educational Institutions and Classrooms
- Benefits of Visualization for Educators and Smarter Teaching Approaches
- Tools and Techniques for Creating Educational Visualizations
- Future Trends in Visual, Digital, and Data-Driven Teaching
- Integrating Visualization into Teaching Practice and Responsible Data Use
- Data-Enhanced Teaching Strategies and Professional Growth



Coordinated By
Dr. S. Sasirekha
Associate Professor, NITTR Chennai

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Join the Course

PRINCIPLES OF OUTCOME BASED ASSESSMENT

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online

Course Layout

- Introduction to OBE: philosophy, evolution, and crafting clear learning outcomes mapped to courses and programs.
- Assessment strategies: direct/indirect methods, performance types, achievement tests, and Table of Specifications.
- Performance assessment: checklists, rating scales, holistic/analytic rubrics, and criteria preparation.
- Digital assessment tools: benefits, free/FOSS tools for formative, summative, and performance assessments.
- Portfolio assessment: e-portfolios, activity tracking, attainment measurement, and continuous quality improvement.



Coordinated By
Dr. K.S.A. Dinesh Kumar **Dr. G. Janardhanan**
NITTR Chennai NITTR Chennai



Dr. V. Shanmuganeethi
NITTR Chennai

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Entrepreneurship and Business Management






Join the Course

INNOVATION DRIVEN ENTREPRENEURSHIP

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online

Course Layout

- Introduction to Innovation in Entrepreneurship
- Idea Generation and Validation
- Design Thinking in Entrepreneurship
- Business Model Innovation
- Technology and Innovation
- Funding Innovation
- Entrepreneurial Mindset, Leadership & Intellectual Property
- Scaling and Growth Strategies, Sustainability & Social Innovation



Coordinated By
Dr. K. S. Giridharan
Professor, NITTR Chennai



FREE
For Learning **3 Credits**




Join the Course

BLUE ECONOMY ENTREPRENEURSHIP

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online

Course Layout

- Foundations of Blue Economy Entrepreneurship, SDGs, and Policy Frameworks.
- Marine Conservation, Sustainable Practices, and Innovation/Technology Applications.
- Financing, Market analysis, Business models, and Sustainable Supply Chains.
- Risk Management, Resilience, Community Engagement, and Social Impact.
- Entrepreneurial Leadership skills and Emerging Trends/opportunities in the Blue Economy.



Coordinated By
Dr. M. Anil Kumar
Associate Professor, NITTR Chennai



FREE
For Learning **3 Credits**




Join the Course

PRODUCT POLICY AND BRAND MANAGEMENT

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online

Course Layout

- Product Management Fundamentals: Strategy, Product levels, classification, differentiation, Life cycle, and New Product development stages.
- Brand Management Basics: Branding concepts, Strategies, Challenges, Brand Equity, Positioning, and Customer value.
- Building brand equity: Brand Elements, Marketing Strategies, and Brand Measurement Tools.



Coordinated By
Dr. Nithya M
Assistant Professor, NIT Calicut



FREE
For Learning **3 Credits**




Join the Course

DATA ANALYTICS

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online

Course Layout

- Data Analytics - An Overview
- Clustering and Classification Techniques
- Machine Learning for Data Science
- Social Network Analysis
- Educational Data Analytics
- Performance Factors Factors Analysis
- Data Visualization
- Learning from Multiple Representations



Coordinated By
Dr. Chandan Chakraborty
Professor, NITTR Kolkata



FREE
For Learning **3 Credits**



Course Layout

- Covers pedagogy, adult learning theory, and evolving business analytics education.
- Focuses on active learning, real-world datasets, and tech-enhanced activities.
- Explains assessment alignment, tool design, and constructive feedback.
- Builds critical thinking, problem-solving, and data-driven reasoning.
- Includes communication, technology integration, inclusive teaching, and future-focused curriculum design.



Coordinated By
Dr. P. Jakulin Divya Mary
Assistant Professor, NITTR Chennai



FREE For Learning 3 Credits

Course Layout

- Marketing fundamentals from an engineering perspective.
- Customer insights, segmentation, and market behavior.
- Value creation, product-market fit, and market research.
- QFD, cost engineering, pricing, and distribution strategy.
- Product lifecycle, strategic marketing, sustainability, and future tech trends.



Coordinated By
Dr. Nithya M
Assistant Professor, NIT Calicut



FREE For Learning 3 Credits



Course Layout

- Basics of social media platforms, data types, and ML roles in analytics.
- ML foundations: classification, regression, clustering, topic modeling, and NLP.
- Applications: sentiment analysis, fake news detection, trend prediction, and influencer analysis.
- Tools: Python, Scikit-learn, NLP libraries with practical case studies.
- Ethics, privacy, and future AI trends.



Coordinated By
Dr. S.V. Kogilavani
Professor, NITTR Chennai



FREE For Learning 3 Credits

Course Layout

- Health Systems Overview
- Hospital Planning and Design
- Hospital Operations Management
- Quality Management and Patient Safety
- Human Resource Management in Healthcare
- Healthcare Finance and Budgeting
- Materials and Supply Chain Management
- Health Information Systems and Digital Health



Coordinated By
Dr. P. Jakulin Divya Mary
Assistant Professor, NITTR Chennai



FREE For Learning 3 Credits

Course Layout

- Sustainability basics and the energy–environment connection.
- 3C’s framework: Clean, Capture, Convert.
- Clean technologies: renewable energy, pollution control, and waste minimization.
- Carbon capture, utilization, circular carbon economy, and energy conversion systems.
- Waste-to-energy, integrated 3C applications, LCA, techno-economic analysis, policies, and future sustainability trends.



Coordinated By
Dr. M. Seenuvasan
Professor, NITTR Chennai



FREE
For Learning **3 Credits**

Course Layout

- Introduces the shift from linear to circular economy with focus on waste valorization.
- Covers technologies, policies, and business models for waste-to-value conversion.
- Explains major waste treatment methods and resource-recovery practices.
- Encourages innovation, entrepreneurship, and national initiatives like Atmanirbhar Bharat.
- Builds interdisciplinary skills through hands-on, real-world circular-economy projects.



Coordinated By
Dr. M. Anil Kumar
Associate Professor, NITTR Chennai



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For Learning **3 Credits**

Leadership, Policy and Accreditation

LEADERSHIP, POLICY
AND ACCREDITATION





Join the Course
**ACADEMIC LEADERSHIP IN
 CROSS CULTURAL CONTEXT OF
 HIGHER EDUCATIONAL INSTITUTIONS**
 26 January - 30 April 2026
 Enrollment Ends : 28 February 2026
 Mode : Online

Course Layout

- Leadership Qualities
- Transformational Leadership
- Excellence through Strategic Planning
- Building world class Institutions
- Quality Assurance, Accreditation and Ranking



Coordinated By
Dr. E.S.M. Suresh
 Professor, NITTTR Chennai



FREE For Learning **3 Credits**



Join the Course
**NATIONAL EDUCATION POLICY
 AND INSTITUTIONAL BUILDING**
 26 January - 30 April 2026
 Enrollment Ends : 28 February 2026
 Mode : Online

Course Layout

- Understanding of NEP 2020
- Application of NEP 2020 in Institutional Contexts
- Curricular and Pedagogical Reforms
- Technology Integration and Blended Learning
- Institutional Leadership and Governance
- Research and Innovation in Education
- Assessment and Continuous Evaluation
- Monitoring and Evaluation of Institutional Development
- Ethical Considerations in Institutional Development



Coordinated By
Dr. G. Janardhanan
 Professor, NITTTR Chennai



FREE For Learning **2 Credits**



Join the Course
**QUALITY ASSURANCE THROUGH
 NAAC ACCREDITATION PROCESS**
 26 January - 30 April 2026
 Enrollment Ends : 28 February 2026
 Mode : Online

Course Layout

- Introduction to Quality Assurance and Accreditation
- Curricular Aspects
- Teaching & Learning, Evaluation
- Research, Consultancy, and Extensions
- Infrastructure and Learning Resources
- Student Support and Progression
- Governance, Leadership, and Management
- Institutional Values & Best Practices



Coordinated By
Dr. E.S.M. Suresh
 Professor, NITTTR Chennai



FREE For Learning **3 Credits**



Join the Course
**SWACHHATA CAMPUS -
 CLEAN, GREEN, AND SUSTAINABLE TECHNOLOGY**
 26 January - 30 April 2026
 Enrollment Ends : 28 February 2026
 Mode : Online

Course Layout

- Introduction to Environmental Issues and Sustainable Development
- Green Campus Initiatives
- Renewable Energy
- Sustainable Construction and Green Building
- Health and Safety



Coordinated By
Dr. E.S.M. Suresh
 Professor, NITTTR Chennai



FREE For Learning **3 Credits**

Course Layout

- Introduction to accreditation, Outcome- Based Education, and key changes in SAR and prequalifiers.
- Vision, mission, PEOs, POs, PSOs, graduate attributes, and complex engineering problems.
- Course outcomes, curriculum structure, gap analysis, and Criterion 1 overview for Tier 1 & 2.
- Outcome-based teaching-learning, student assessment, attainment of COs/POs/PSOs, and Criteria 2-6.
- Infrastructure, continuous improvement, student support, governance, accreditation application process, and visit challenges.



Coordinated By

Dr. R.K. Dixit **Dr. Sanjay Agrawal**
 Professor, NITTR, Bhopal Professor, NITTR, Bhopal



FREE For Learning **3 Credits**

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Course Layout

- Introduction to NBA accreditation, accreditation types, and overall process.
- Self-assessment using NBA criteria with gap analysis for improvements.
- Development and alignment of PEOs, POs, and curriculum structure.
- Teaching-learning strategies, assessments, faculty development, and industry collaboration.
- SSR preparation, data presentation, evaluation visit readiness, and continuous improvement.



Coordinated By

Dr. Umashanker Sahu **Dr. P. Jakulin Divya Mary**
 Professor, NITTR Chennai Assistant Professor, NITTR Chennai



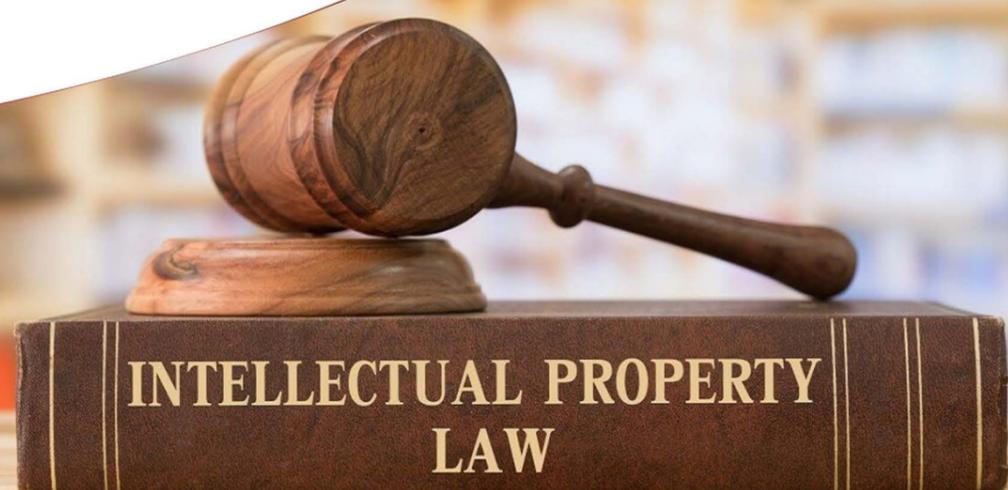
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Legal and Intellectual Property






Join the Course

RESEARCH METHODOLOGY AND IPR

26 January - 30 April 2026
 Enrollment Ends : 28 February 2026
 Mode : Online

Course Layout

- Research Design
- Data Collection and Sources
- Data Analysis and Reporting
- Intellectual Property Rights
- Patents



Coordinated By
Dr. G. Janardhanan
Professor, NITTR Chennai



FREE For Learning 3 Credits




Join the Course

INTELLECTUAL PROPERTY RIGHTS

26 January - 30 April 2026
 Enrollment Ends : 28 February 2026
 Mode : Online

Course Layout

- Introduction to IPR: patents, copyrights, trademarks, industrial designs, IC layout designs, geographical indications, plant varieties, trade secrets, and related rights.
- Patents: Indian patent system and complete filing procedure with case studies.
- Copyrights, trademarks, and GIs: key concepts, major aspects, and legal provisions.
- Industrial designs, IC layout designs, and trade secrets: concepts, essential elements, and provisions.
- IP support system: roles of WIPO and similar international organizations.



Coordinated By
Dr. P.K. Purohit
Professor, NITTR Bhopal



FREE For Learning 2 Credits




Join the Course

3P'S FOR ACADEMIA – DRAFTING PUBLICATION, PROPOSALS AND PATENTS

26 January - 30 April 2026
 Enrollment Ends : 28 February 2026
 Mode : Online

Course Layout

- Academic writing, research articles, manuscript submission, and publication ethics.
- Comprehensive training in drafting competitive project proposals and understanding funding requirements
- Explores intellectual property rights, prior art search, and patentability basics
- Teaches drafting patent applications and claims with practical case studies
- Provides insights on best practices and showcases success stories from academia and industry



Coordinated By
Dr. E. Balasubramanian
Professor, NITTR Chennai



Dr. K.N Shoba
Associate Professor,
NITTR Chennai



Dr. M. Anil Kumar
Associate Professor,
NITTR Chennai



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Technical Training in Vernacular Language

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Join the Course

**DIGITAL CIRCUIT DESIGN—
A PRACTICAL APPROACH (HINDI LANGUAGE)**

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online



Coordinated By
Dr. Kanika Sharma
Associate Professor, NITTR Chandigarh

Course Layout

- Introduction to Digital Circuits Design
- Procedure and Designing of Combinational Logic Circuits
- Designing of Combinational Logic Circuits
- Designing of Sequential Logic Circuits



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Join the Course

**DIGITAL ELECTRONICS:
THEORY AND PRACTICE (IN PUNJABI)**

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online



Coordinated By
Dr. Balwinder Singh Dhaliwal
Associate Professor, NITTR Chandigarh

Course Layout

- Number Systems
- Binary Arithmetic Operations
- Logic Gates and Boolean Algebra
- Minimization of Boolean Expressions using Karnaugh Map (K-Map)
- Combinational Logic Circuits
- Sequential Circuits
- Memory Devices
- Digital to Analog (D/A) & Analog to Digital (A/D) Converters



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**INDIAN KNOWLEDGE SYSTEM
(HINDI)**

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online



Coordinated By
Dr. Roli Pradhan
Assistant Professor, NITTR Bhopal

Course Layout

- भारतीय ज्ञान परंपरा का इतिहास
- भारत का विशिष्ट ज्ञान और भारत का ज्ञानमीमांसा
- प्राचीन भारत के पवित्र ग्रंथ
- प्राचीन शिक्षा प्रणाली
- प्राचीन भारतीय ज्ञान परंपरा: खगोल विज्ञान, वास्तुकला, आयुर्वेद और कृषि
- प्राचीन भारत में धातुकर्म, गणित, युद्ध विज्ञान, नियुद्ध कला और पर्यावरण विज्ञान
- भारतीय ज्ञान परंपरा में भाषा, छंद, नाट्यशास्त्र और चेतना का विज्ञान
- भारतीय ज्ञान परंपरा में शासन व्यवस्था और सार्वजनिक प्रशासन



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Join the Course

MOBILE AND WIRELESS COMMUNICATION (IN HINDI)

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online

Course Layout

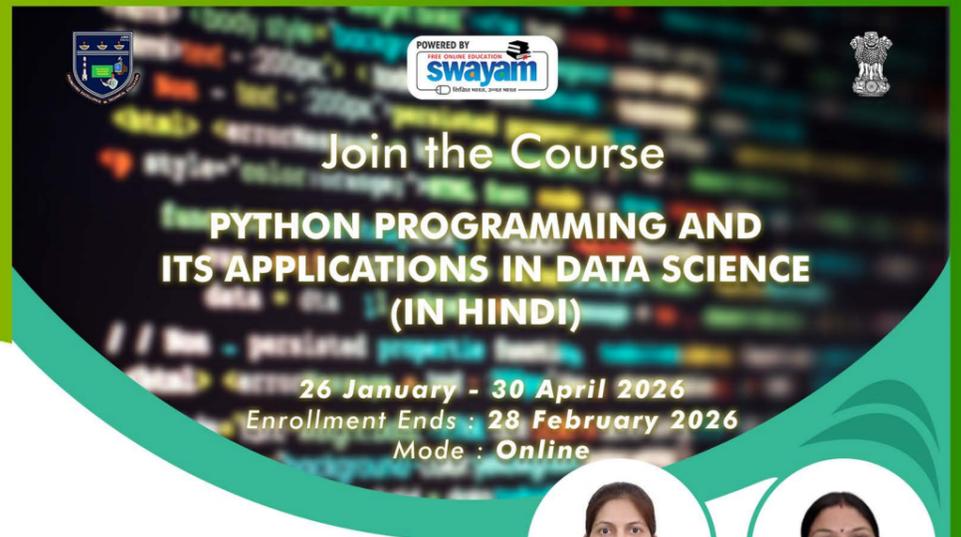
- Learners and Teachers
- Mentoring Basics
- Mentoring Stages & Areas
- Mentoring Strategies
- Counselling Basics
- Counselling Skills
- Counselling Strategies & Areas
- Self care for Teachers and Summary



Coordinated By
Dr. Garima Saini
Assistant Professor, NITRR Chandigarh



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Join the Course

PYTHON PROGRAMMING AND ITS APPLICATIONS IN DATA SCIENCE (IN HINDI)

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online

Course Layout

- Python basics: data types, I/O, operators, control flow, functions, modules, arrays, strings.
- Core data structures: lists, tuples, dictionaries, sets.
- File handling, exceptions, CSV/JSON processing.
- Data science essentials with NumPy, Pandas; data cleaning and transformation.
- Outlier handling, imbalance treatment, visualisation, and EDA techniques.



Coordinated By
Dr. Mala Kalra
Assistant Professor, NITRR, Chandigarh



Coordinated By
Dr. Shano Solanki
Associate Professor, NITRR, Chandigarh



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Join the Course

PLC AND MICROCONTROLLER (INSTRUCTION MEDIUM: HINDI)

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online

Course Layout

- Introduction to 8051 Microcontroller
- Programming Languages of 8051
- Embedded C Programming of 8051
- 8051 Timers
- PLC
- Instruction Set of PLC
- PLC programming using Ladder Logic
- Practicals on Allen Bradley based Universal PLC Platform



Coordinated By
Dr. Ritula Thakur
Associate Professor, NITRR Chandigarh



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Technology And Engineering








Join the Course

3D PRINTING AND DESIGN FOR EDUCATORS

26 January - 30 April 2026
 Enrollment Ends : 28 February 2026
 Mode : Online

Course Layout

- Additive Manufacturing Introduction and CAD
- Data Preparation for 3D Printing
- 3D Printers and Software
- 3D Printing Materials
- Solid based 3D Printing Processes
- Liquid based 3D Printing Processes
- Powder based 3D Printing Processes



Coordinated By
Dr. Sharad K. Pradhan
 Professor, NITTR Bhopal



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Join the Course

3D PRINTING OF AUXETIC STRUCTURES: THEORY AND PRACTICES

26 January - 30 April 2026
 Enrollment Ends : 28 February 2026
 Mode : Online

Course Layout

- Introduction to 3D printing
- Operational procedures and protocols, SOPS
- Polymer 3D printing
- Gel 3D printing
- Metal 3D printing
- Introduction to sensors
- Case Studies



Coordinated By
Dr. Rupinder Singh
 Professor, NITTR Chandigarh



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Join the Course

APPLICATION IN POWER ELECTRONICS ENGINEERING

26 January - 30 April 2026
 Enrollment Ends : 28 February 2026
 Mode : Online

Course Layout

- Power Electronic Devices Power electronic devices-Power diodes
- Power transistor
- Phase Controlled Rectifiers Phase control
- DC-DC Converters- Non-Isolated- Buck, Boost, Buck- Boost and
- Cuk converters
- Introduction to self-commutated switches
- Multilevel inverters: diode-clamped, flying capacitor, and cascaded
- types - comparison, PWM techniques, and applications.



Coordinated By
Dr. G.A. Rathy
 Professor, NITTR Chennai



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Join the Course

OPERATION AND MAINTENANCE PRACTICES FOR SMALL HYDRO POWER PLANTS

26 January - 30 April 2026
 Enrollment Ends : 28 February 2026
 Mode : Online

Course Layout

- Introduction to Small Hydropower and basic plant operation.
- Civil structures and their maintenance.
- Hydro-mechanical equipment, turbines, and governing systems.
- Electrical components, controls, instrumentation, and monitoring.
- SHP operation practices, maintenance, and safety procedures.



Coordinated By
Dr. Sharad K. Pradhan
 Professor, NITTR Bhopal



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Join the Course

DESIGN THINKING FOR EDUCATORS

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online

Course Layout

- Design Thinking: Mindsets and Processes
- Empathize Phase
- Define Phase
- Ideate Phase
- Prototype Phase
- Test Phase
- Implement Phase
- Reflect Phase



Coordinated By
Dr. S. Saravana Perumaal
Associate Professor, NITTR Chennai



FREE For Learning 3 Credits



Join the Course

ELECTRIC VEHICLE TECHNOLOGY FOR ACADEMIA

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online

Course Layout

- Electric Vehicle Components and Architecture
- Embedded Controllers for EV
- Power Electronics Converters for EV
- Electrical Motors for EV
- Battery Management Systems (BMS) for EV
- Modelling and Simulation of EV
- Electric Vehicle Charging
- Advanced Driver Assistant Systems and Electric Vehicle Standards



Coordinated By
Dr. G.A. Rathy
Professor, NITTR Chennai



Coordinated By
Dr. R. Suja Mani Malar
Associate Professor, NITTR Chennai



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Join the Course

UAV IN ENGINEERING APPLICATIONS

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online

Course Layout

- Introduction, Classifications, Applications and Payloads of UAV
- Aerodynamics and Computational Fluid Dynamic Analysis of UAV
- Design, Assembly, Integration and Testing of Quadcopter
- Industrial and Engineering Applications of UAVs
- Development of Amphibious UAV for water quality monitoring
- SWARM of UAVs for 3D Mapping using Stereo vision system
- Development of Flapping Wing Vehicle (FWV)
- DGCA Rules, Regulation and Future Engineering Application of UAVs



Coordinated By
Dr. E. Balasubramanian
Professor, NITTR Chennai



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Join the Course

AUGMENTED & VIRTUAL REALITY – FOUNDATIONS AND APPLICATIONS

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online

Course Content

- Foundations of AR & VR technologies
- XR system architecture, hardware, and interaction design
- 3D content creation using open-source and industry-standard tools
- Programming in Unity/Unreal for AR and VR applications
- Case studies in education, healthcare, manufacturing, and industry 4.0
- Ethical, accessibility, and usability aspects of immersive technologies
- Capstone project showcasing practical AR/VR solutions



Coordinated By
Dr. P. Malliga
Professor, NITTR Chennai



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Join the Course
**INTERNET OF THINGS:
DESIGN CONCEPTS AND USE CASES**

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online



Coordinated By
Dr. Maitreyee Dutta
Professor, NITTR Chandigarh

Course Layout

- Introduction to IoT
- Communication Protocols in IoT with Implementation using Contiki OS
- Arduino Basics
- Practical Interfacing with Arduino:
- Sensor interfacing: LCD, DHT11, Gas and Water Level Sensors with Arduino, soil moisture, IR, sound, and flame sensors with Arduino
- Case Study



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For Learning **3 Credits**



Join the Course
**CLIMATE CHANGE AND
DISASTER RISK MANAGEMENT**

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online



Coordinated By
Dr. Rakesh Wats
Professor,
NITTR Chandigarh



Coordinated By
Dr. G. Janardhanan
Professor,
NITTR Chennai

Course Layout

- Climate Change Basics, GHGs, Evidence, and Global/IPCC Projections
- Impacts on agriculture, water, biodiversity, health, and vulnerability studies
- Disaster types, risk assessment, and disaster-risk reduction frameworks
- Climate-disaster links: floods, droughts, heatwaves, and key global/national policies
- Adaptation, mitigation, renewable energy, community resilience, and early-warning systems



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Join the Course
**LINUX APPLICATIONS IN
ENGINEERING EDUCATION**

26 January - 30 April 2026
Enrollment Ends : 28 February 2026
Mode : Online



Coordinated By
Dr. Amit Doegar
Associate Professor,
NITTR Chandigarh

Course Layout

- Introduction to Linux OS and its Applications in Engineering
- Linux File System, Basic Commands, and Permissions
- Process Management, Scheduling (cron, at), and Monitoring
- Networking Essentials and Remote Access (SSH, SCP)
- Shell Scripting for Automation in Engineering Tasks
- Server Setup for Engineering Labs (FTP, Web, Samba)



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For Learning **3 Credits**



Join the Course
**ENVIRONMENTAL SCIENCE
AND ENGINEERING**

26 January - 30 Apr 2026
Enrollment Ends : 28 February 2026
Mode : Online



Coordinated By
Dr. M. Anil Kumar
Associate Professor,
NITTR Chennai



Coordinated By
Dr. M. Seenuvasan
Professor,
NITTR Chennai

Course Layout

- Basics of environmental science, resources, ecosystems, and biodiversity.
- Air, water, soil, noise, thermal, and marine pollution.
- Climate change, global issues, and sustainability.
- Waste management, biotechnology, EIA, and policies.
- EMS, green technologies, and future environmental trends.



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Course Layout

- 3D Modeling & VR Basics
3D concepts, transformations, Blender interface, object creation.
- Viewing, Geometry & Modeling
Camera pipeline, projections, mesh editing, modifiers, topology, sculpting.
- Materials, Lighting & Rendering
PBR shaders, UV mapping, texture painting, lighting types, HDRI.
- Environment, Animation & Physics
Level design, keyframes, rigging, controllers, collisions, forces.
- AI, VR Integration & Capstone
AI logic, rendering optimization, VR setup, model import, full VR mini-project deployment.



Coordinated By
Dr. B. Yogameena
Professor, NITTR Chennai



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Course Layout

- Covers unconstrained optimization: 1D search, single-variable minimization, Golden Section, and optimality conditions.
- Introduces key methods: Steepest Descent, Conjugate Gradient, and Newton's Method.
- Explores Linear Programming and the Simplex Method.
- Includes constrained optimization: graphical methods, Lagrangian, convexity.
- Concludes with advanced methods: Geometric/Integer Programming, Simulated Annealing, Genetic Algorithms, Branch & Bound, Dynamic Programming, and Pareto optimality.



Coordinated By
Dr. Nirmal Kumar Mandal
Associate Professor, NITTR Kolkata



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**Exams for the January
2026 Semester will
be conducted in
June, 2026.**



Exam Type : CBT

Exam Registration : To be announced later.



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