National Institute of Technical Teachers Training and Research
Ministry of Education, Government of India, Taramani, Chennai 600 113
राष्ट्रीय तकनीकी शिक्षक प्रशिक्षण एवं अनुसंधान संस्थान
शिक्षा मंत्रालय, भारत सरकार, तरमणि, चेन्नई 600 113

Advt. No.: 4/2023-24   **Date: 08.07.2023**

RECRUITMENT OF FACULTY POSITIONS

1. Name of the Post   : ASSOCIATE PROFESSOR

2. Number of Post(s)   : 4 (Four) - Branch-wise details are given below
   with reservation

Branch	No. of Post(s)	Reservation			
		SC	ST	OBC	UR
Rural & Entrepreneurship Development	1	0	1	0	0
Mathematics	1	1	0	0	0
Computer Science & Engineering	1	0	0	0	1
Educational Media &Technology	1	0	0	1	0
Total	**4**	**1**	**1**	**1**	**1**

3. Pay Level (as per 7th CPC) : Level – 13A1 (Rs.1,31,400-2,04,700)

4. Age   : 45 Years

5. Qualifications and experience (Branch wise):

If a Class/ Division is not awarded, minimum of 60% marks in aggregate shall be considered as equivalent to First Class/ Division. If a Grade Point System of 10.0 scale is adopted, the CGPA will be converted into its equivalent percentage of marks as indicated below:
6.25 = 55%, 6.75 = 60%, 7.25 = 65%, 7.75 = 70% and 8.25 = 75%.

ASSOCIATE PROFESSOR IN
RURAL AND ENTREPRENEURSHIP DEVELOPMENT

A. Essential Qualification:

(a) (i)   B.E./ B.Tech. in any branch of Engineering / Technology
(ii) M.E./ M.Tech./ in any branch of Engineering/ Technology/ MBA
(iii) Ph.D. in relevant field
(iv) First class or equivalent either at Bachelor's or Master's level
AND
(b) At least total 6 research publications in SCI journals / UGC / AICTE approved list of journals.
AND
(c) Minimum of 8 years of experience in teaching / research / industry / startups / Entrepreneurship / Rural Development and Management / Rural Technology Projects out of which at least 2 years shall be Post Ph.D. experience.

Note: Candidates who have completed Direct Ph.D. after the Bachelor's Degree from Institutes of National Importance with GATE shall be eligible for the post of Associate Professor.

OR

(a) Master's Degree in Entrepreneurship / Social Entrepreneurship / Social Innovation and Entrepreneurship / Rural Entrepreneurship with at least 55% marks (or an equivalent grade in a point scale wherever grading system is followed).

(b) Ph.D. Degree in relevant field

(c) A minimum of eight years of experience of teaching and/or research in an academic/ research position equivalent to that of Assistant Professor in a University/ College/ Accredited Research Institution / Industry with a minimum of seven publications in the peer reviewed/UGC listed journals and a total research score of Seventy Five (75) as per the criteria given in Annexure -1 (Table 1).

(d) Contribution to startups / Entrepreneurship / Rural Development and Management / Rural Technology Projects / educational innovation / design of new curricula and courses and technology – mediated teaching learning process.

B. Desirable Qualification:
- Conducting training programmes for the faculty members and students in the emerging areas of Entrepreneurship / Start ups / Innovation and Incubation centres / Rural Development and Management / Rural Technology

- Expertise in curriculum design, development and revision for non-formal trades

- Expertise in developing and Offering MOOCs to faculty members, research scholars and students

- Teaching, research, industrial and/or professional experience in a reputed organization

- Published work, such as research papers, patents filed/obtained, books, and / or technical reports in Entrepreneurship / Startups / Rural Development and Management/ Rural Technology

- Experience of guiding the project work/dissertation of PG/ Research (Ph.D.) students or supervising R & D projects related to Entrepreneurship/ Rural Development and Management/ Rural Technology

- Integration of Information Technology in the specific area of specialization

- Successful completion of AICTE - NITTT modules as specified in the comprehensive training policy for technical teachers

- Experience in Instructional Design, Educational Video Production, Immersive Technology and Extended Reality

C. Job Description & Responsibilities:

- Organize, conduct and evaluate education and training programmes in emerging pedagogy, content and technology areas

- Organize/ coordinate the relevant long-term programmes and short term courses, workshops, webinars and other activities for the National and International clients in a variety of delivery modes by adopting inter-disciplinary approach

- Assist the Institute in conceiving designing, trying out and implementation of innovative approaches in education and training, development of curricula, design of instructional materials and development of courseware

- Facilitate the development of innovative resources like modules, manuals, scripts for ETV programmes, MOOCs, Computer-based Multimedia Learning Packages and e-books

- Integrate ICT tools in administering the training / education programmes

- Facilitate the development of instructional resources using latest technology like AR / VR.

- Function as an effective member of inter-disciplinary and multifunctional teams of the institute in conceiving, formulating and undertaking various development projects in selected areas of Technical Teachers Education

- Remain up-to-date in terms of knowledge, information and competencies with regard to latest innovations and advances in Entrepreneurship / Startups / Rural Development and Management and have the required aptitude and ability to judiciously apply the same in training of personnel in technical education systems

- Develop/ update the facilities in the Institute for relevant/ specific applications and maintain the laboratory equipment, facilities and the stocks of the Department / Centre

- Undertake Research & Development in any one of the emerging areas of Entrepreneurship / Startups / Rural Development and Management

- Undertake/ Assist in consultancy and sponsored R&D projects

- Guide research works and project work/dissertation of PG/ Research (Ph.D.) students

- Participate in Co-curricular and extracurricular activities

- Assist in departmental and institutional administration

- Participate in quality assurance and ranking framework activities

- Serve either in Headquarters or in Extension centres

- Adherence to conduct rules and regulations

- Any other job assigned by the competent authority

ASSOCIATE PROFESSOR IN MATHEMATICS

A. Essential Qualification:

(a) Master's Degree in Mathematics/ Applied Mathematics with at least 55% marks (or an equivalent grade in a point scale wherever grading system is followed).

(b) Ph.D. Degree in relevant field

(c) A minimum of eight years of experience of teaching and/or research in an academic/ research position equivalent to that of Assistant Professor in a University/ College/ Accredited Research Institution/ industry with a minimum of seven publications in the peer reviewed/ UGC listed journals and a total research score of Seventy Five (75) as per the criteria given in Annexure – 1 (Table 1).

(d) Contribution to educational innovation, design of new curricula and courses, and technology – mediated teaching learning process.

B. Desirable Qualification:

- Conducting training programmes for the faculty members and students in the areas of Mathematics
- Expertise in curriculum design, development and revision
- Expertise in developing and Offering MOOCs to faculty members, research scholars and students
- Teaching, research, industrial and/or professional experience in a reputed organization
- Published work, such as research papers, patents filed/obtained, books, and / or technical reports
- Expertise in offering newer pedagogical or Heutagogical strategies for the faculty members
- Experience of guiding the project work/dissertation of PG/ Research (Ph.D.) students or supervising R & D projects
- Handling International / National Projects
- Integration of Information Technology in the specific area of specialization
- Successful completion of AICTE - NITTT modules as specified in the comprehensive training policy for technical teachers
- Experience in Instructional Design, Educational Video Production, Immersive Technology and Extended Reality

C. Job Description & Responsibilities:

- Organize, conduct and evaluate education and training programmes in emerging pedagogy, content and technology areas
- Organize/ coordinate the relevant long-term programmes and short term courses, workshops, webinars and other activities for the National and International clients in a variety of delivery modes by adopting inter-disciplinary approach

- Assist the Institute in conceiving designing, trying out and implementation of innovative approaches in education and training, development of curricula, design of instructional materials and development of courseware
- Facilitate the development of innovative resources like modules, manuals, scripts for ETV programmes, MOOCs, Computer-based Multimedia Learning Packages and e-books
- Integration of ICT tools in administering the training / education programmes
- Facilitate the development of instructional resources using latest technology like AR / VR.
- Function as an effective member of inter-disciplinary and multifunctional teams of the institute in conceiving, formulating and undertaking various development projects in selected areas of Technical Teachers Education
- Remain up-to-date in terms of knowledge, information and competencies with regard to latest innovations and advances in Mathematics and have the required aptitude and ability to judiciously apply the same in training of personnel in technical education systems
- Develop/ update the facilities in the Institute for relevant/ specific applications and maintain the laboratory equipment, facilities and the stocks of the Department / Centre
- Undertake Research & Development in any one of the emerging areas of Mathematics
- Undertake / Assist in consultancy and sponsored R&D projects
- Guide research works and project work/dissertation of PG/ Research (Ph.D.) students
- Participate in Co-curricular and extracurricular activities
- Assist in departmental and institutional administration
- Participate in quality assurance and ranking framework activities
- Serve either in Headquarters or in Extension centres
- Adherence to conduct rules and regulations
- Any other job assigned by the competent authority

ASSOCIATE PROFESSOR IN COMPUTER SCIENCE & ENGINEERING

A. Essential Qualification:

(a) (i) B.E./ B.Tech. degree in CSE / IT
   (ii) M.E./ M.Tech. degree in CSE / IT / Software Engineering / Cyber security / Artificial Intelligence / Machine Learning
   (iii) Ph.D. in the relevant field
   (iv) First class or equivalent either at Bachelor's or Master's level

AND

(b) At least total 6 research publications in SCI Journals/ UGC/ AICTE approved list of journals

AND

(c) Minimum of 8 years of experience in teaching/ research/ industry, out of which at least 2 years shall be Post Ph.D. experience.

Note: Candidates who have completed Direct Ph.D. after the Bachelor's Degree from Institutes of National Importance with GATE shall be eligible for the post of Associate Professor.

B. Desirable Qualification:

- Research expertise in any one of the following areas: Software Systems, Information Security, Artificial Intelligence and Deep Learning, Parallel Computing, High Performance Computing, Big Data Analytics, Blockchain Technologies
- Experience in conducting training programmes for the faculty members / students in the emerging areas of CSE / IT and educational technologies
- Expertise in Instructional / Learning Resources Development, MOOC and online learning resources
- Expertise in curriculum design, development and revision for the CSE / IT domain
- Expertise in offering newer pedagogical or Heutagogical strategies for the faculty members
- Teaching, research, industrial and / or professional experience in a reputed organization
- Published work, such as research papers, patents filed / obtained, books, and/or technical reports
- Handling National/International Projects
- Integration of Information Technology in the area of specialisation
- Successful completion of AICTE - NITTT modules as specified in the comprehensive training policy for technical teachers

C. Job Description & Responsibilities:

- Organize, conduct and evaluate education and training programmes in emerging pedagogy, content and technology areas
- Organize/ coordinate the relevant long-term programmes and short term courses, workshops, webinars and other activities for the National and International clients in a variety of delivery modes by adopting inter-disciplinary approach
- Assist the Institute in conceiving designing, trying out and implementation of innovative approaches in education and training, development of curricula, design of instructional materials and development of courseware
- Facilitate the development of innovative resources like modules, manuals, scripts for ETV programmes, MOOCs, Computer-based Multimedia Learning Packages and e-books
- Integrate ICT tools in administering the training / education programmes
- Facilitate the development of instructional resources using latest technology like AR / VR.
- Function as an effective member of inter-disciplinary and multifunctional teams of the institute in conceiving, formulating and undertaking various development projects in selected areas of Technical Teachers Education
- Remain up-to-date in terms of knowledge, information and competencies with regard to latest innovations and advances in CSE / IT and have the required aptitude and ability to judiciously apply the same in training of personnel in technical education systems
- Develop/ update the facilities in the Institute for relevant/ specific applications and maintain the laboratory equipment, facilities and the stocks of the Department / Centre
- Undertake Research & Development in any one of the emerging areas of IT
- Undertake / Assist in consultancy and sponsored R&D projects
- Guide research works and project work/dissertation of PG/ Research (Ph.D.) students
- Participate in Co-curricular and extracurricular activities
- Assist in departmental and institutional administration
- Participate in quality assurance and ranking framework activities
- Serve either in Headquarters or in Extension centres
- Adherence to conduct rules and regulations
- Any other job assigned by the competent authority

ASSOCIATE PROFESSOR IN EDUCATIONAL MEDIA &TECHNOLOGY

A. Essential Qualification:

    (a) (i)   B.E./ B.Tech. degree in ECE/ CSE/ IT / Electronic Media / Multimedia
        (ii) M.E./ M.Tech. degree in ECE / CSE / IT / Electronic Media / Multimedia
        (iii) Ph.D. in the relevant field and
        (iv) First class or equivalent either at Bachelor's or Master's level

<div align="center">AND</div>

    (b) At least total 6 research publications in SCI Journals/ UGC/ AICTE approved list of journals

<div align="center">AND</div>

    (c) Minimum of 8 years of experience in teaching/ research/ industry out of which at least 2 years shall be Post Ph.D. experience.

Note: Candidates who have completed Direct Ph.D. after the Bachelor's Degree from Institutes of National Importance with GATE shall be eligible for the post of Associate Professor.

B. Desirable Qualification:

- Specialized knowledge in one or more of the following fields:
    - Immersive technologies (AR / VR / MR)
    - Video Production
    - Graphics and Animation
    - IP TV and IP based video transmission, video compression codec
    - Broadcasting / Multicasting / Satellite based transmission

- Conducting training programmes for the faculty members and students in the emerging areas of Multimedia and Educational Technology

- Expertise in curriculum design, development and revision for Multimedia & E-learning technologies

- Expertise in developing and offering MOOCs to faculty members, research scholars and students

- Expertise in offering pedagogical or Heutagogical strategies for the faculty members

- Teaching, research, industrial and/or professional experience in a reputed organization

- Published work, such as research papers, patents filed/ obtained, books, and/or technical reports

- Experience of guiding the project work/dissertation of PG/ Research (Ph.D.) students or supervising R & D projects in industry

- Handling Multimedia / Educational Technology Projects

- Integration of Information Technology in the specific area of specialization

- Successful completion of AICTE - NITTT modules as specified in the comprehensive training policy for technical teachers

- Experience in Instructional Design, Educational Video Production, Immersive Technology and Extended Reality

C. Job Description & Responsibilities:

- Organize, conduct and evaluate education and training programmes in emerging pedagogy, content and technology areas
- Organize/ coordinate the relevant long-term programmes and short term courses, workshops, webinars and other activities for the National and International clients in a variety of delivery modes by adopting inter-disciplinary approach
- Assist the Institute in conceiving designing, trying out and implementation of innovative approaches in education and training, development of curricula, design of instructional materials and development of courseware
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- Integrate ICT tools in administering the training / education programmes
- Facilitate the development of instructional resources using latest technology like AR / VR.
- Function as an effective member of inter-disciplinary and multifunctional teams of the institute in conceiving, formulating and undertaking various development projects in selected areas of Technical Teachers Education
- Remain up-to-date in terms of knowledge, information and competencies with regard to latest innovations and advances in Media and Educational Technology and have the required aptitude and ability to judiciously apply the same in training of personnel in technical education systems
- Develop/ update the facilities in the Institute for relevant/ specific applications and maintain the laboratory equipment, facilities and the stocks of the Department / Centre
- Undertake Research & Development in any one of the emerging areas of Media and Educational Technology
- Undertake / Assist in consultancy and sponsored R&D projects
- Guide research works and project work/dissertation of PG/ Research (Ph.D.) students
- Participate in Co-curricular and extracurricular activities
- Assist in departmental and institutional administration
- Participate in quality assurance and ranking framework activities
- Serve either in Headquarters or in Extension centres
- Adherence to conduct rules and regulations
- Any other job assigned by the competent authority

Table-1

Calculation of Academic/ Research Score

(Assessment must be based on evidence produced by the teacher such as: copy of publications, project sanction letter, utilization and completion certificates issued by the University and acknowledgements for patent filing and approval letters, students' Ph.D. award letter, etc.)

S. No.	Academic/ Research Activity	Faculty of Sciences/ Engineering Agriculture / Medical / Veterinary Sciences	Faculty of Language/ Humanities/ Arts/ Social Sciences/ Library/ Education/ Physical Education/ Commerce/ Management & other related disciplines
1	Research Papers in Peer-Reviewed or UGC listed Journals	08 per paper	10 per paper
2	**Publications (other than Research papers)**		
	(a) Books authored which are published by ;		
	International publishers	12	12
	National publishers	10	10
	Chapter in Edited Book	05	05
	Editor of Book by International Publisher	10	10
	Editor of Book by National Publisher	08	08
	(b) Translation works in Indian and Foreign Languages by qualified faculties		
	Chapter or Research paper	03	03
	Book	08	08
3	**Creation of ICT mediated Teaching Learning pedagogy and content and development of new and innovative courses and curricula**		
	(a) Development of Innovative pedagogy	05	
	(b) Design of new curricula and courses	02 per curricula / course	02 per curricula / course
	(c) MOOCs		
	Development of complete MOOCs in 4 quadrants (4 credit courses) (in case of MOOCs of lesser credits 05 marks / credit)	20	20
	MOOCs (developed in 4 quadrant) per module / lecture	05	05
	Content writer / subject matter expert for each module of MOOCs (atleast one quadrant)	02	02
	Course coordinator for MOOCs (4 credit course) (In case of MOOCs of lesser credits 02 marks / credit)	08	08
	(d) E-Content		
	Development of e-Content in 4 quadrants for a complete course/e-book	12	12
	e-Content (developed in 4 quadrants) per module	05	05
	Contribution to development of e-content module in complete course/ paper/ e-book (atleast one quadrant)	02	02
	Editor of e-content for complete course/ paper/ e-book	10	10

S. No.	Academic/ Research Activity	Faculty of Sciences/ Engineering Agriculture / Medical / Veterinary Sciences	Faculty of Language/ Humanities/ Arts/ Social Sciences/ Library/ Education/ Physical Education/ Commerce/ Management & other related disciplines
4	**(a) Research guidance**		
	Ph.D.	10 per degree awarded 05 per thesis submitted	10 per degree awarded 05 per thesis submitted
	M.Phil./P.G. dissertation	02 per degree awarded	02 per degree awarded
	(b) Research & Consultancy* Projects completed		
	More than 10 lakhs	10	10
	Less than 10 Lakhs (proportionately one mark per lakh)	05	05
	(c) Research & Consultancy* Projects ongoing		
	More than 10 lakhs	05	05
	Less than 10 Lakhs	02	02
5	**(a) Patents**		
	International	10	10
	National	07	07
	(b) * Policy Document (Submitted to an International body/ organisation like UNO/ UNESCO/ World Bank/ International Monetary Fund etc. or Central Government or State Government		
	International	10	10
	National	07	07
	State	04	04
	(c) Awards / Fellowship		
	International	07	07
	National	05	05
6	*** Invited lectures / Resource Person / Paper presentation in Seminars/ Conferences/ Full paper in Conference Proceedings (Paper presented in Seminars/ Conferences and also published as full paper in Conference Proceedings will be counted only once)**		
	International (Abroad)	07	07
	International (within country)	05	05
	National	03	03
	State / University	02	02

The research score for research papers would be augmented as follows:
Peer-Reviewed or UGC-listed Journals (Impact factor to be determined as per Thomson Reuters list):
 i) Paper in refereed journals without impact factor - 5 Points
 ii) Paper with impact factor less than 1 - 10 Points
 iii) Paper with impact factor between 1 and 2 - 15 Points
 iv) Paper with impact factor between 2 and 5 - 20 Points
 v) Paper with impact factor between 5 and 10 - 25 Points
 vi) Paper with impact factor >10 - 30 Points

(a) Two authors: 70% of total value of publication for each author.

(b) More than two authors: 70% of total value of publication for the First/ Principal/ Corresponding author and 30% of total value of publication for each of the joint authors.

Joint Projects: Principal Investigator and Co-investigator would get 50% each.

Note:

- Paper presented if part of edited book or proceeding then it can be claimed only once.

- For joint supervision of research students, the formula shall be 70% of the total score for Supervisor and Co-supervisor. Supervisor and Co-supervisor, both shall get 7 marks each.

- For purpose of calculating research score of the teacher, the combined research score from the categories of 5(b). Policy Department and 6. Invited lectures/ Resource Person/ Paper presentation shall have an upper capping of thirty percent of the total research score of the teacher concerned.

- The research score shall be from the minimum of three categories out of six categories.

- Consultancy includes industrial and academic training, testing and research earning revenue.