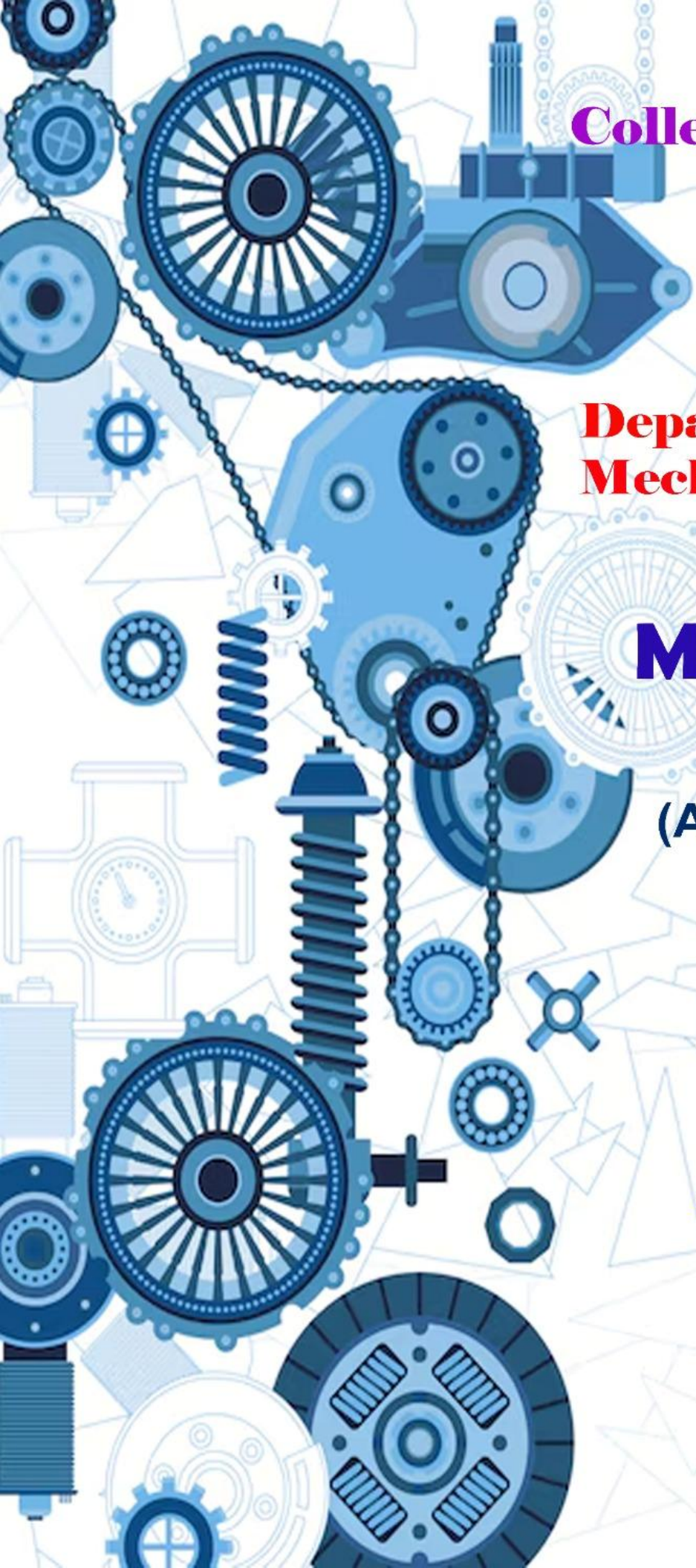

# DMI
## College of Engineering

### Department of Mechanical Engineering

# MEVOLUTION 24-2

(Aug 2024-Jan 2025)

## Editors


Mr. E M Pradeep
Assistant Professor

Mr. Naayagan S
IV Mech Student


# News Letter

# STUDENTS ACHIEVEMENTS

## RAPID MANUFACTURIN

Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India
कौशल भारत-कुशल भारत

This certificate is awarded to

MANOJ P

for successfully completing the course

**Rapid Manufacturing**

with a consolidated score of 60 %

| Online Assignments | 22.19/25 | Proctored Exam | 37.5/75 |
|---|---|---|---|

Total number of candidates certified in this course: 2026

Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

Jul-Oct 2024
(12 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

Indian Institute of Technology Kanpur

swayam

Roll No: NPTEL24ME115S856311115 To verify the certificate No. of credits recommended: 3 or 4

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NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India
कौशल भारत-कुशल भारत

This certificate is awarded to

KARTHIKEYAN K

for successfully completing the course

**Rapid Manufacturing**

with a consolidated score of 43 %

| Online Assignments | 13.44/25 | Proctored Exam | 30/75 |
|---|---|---|---|

Total number of candidates certified in this course: 2026

Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

Jul-Oct 2024
(12 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

Indian Institute of Technology Kanpur

swayam

Roll No: NPTEL24ME115S856311094 To verify the certificate No. of credits recommended: 3 or 4

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NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India
कौशल भारत-कुशल भारत

This certificate is awarded to

RAJ SINGH

for successfully completing the course

**Rapid Manufacturing**

with a consolidated score of 56 %

| Online Assignments | 16.56/25 | Proctored Exam | 39/75 |
|---|---|---|---|

Total number of candidates certified in this course: 2026

Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

Jul-Oct 2024
(12 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

Indian Institute of Technology Kanpur

swayam

Roll No: NPTEL24ME115S756310996 To verify the certificate No. of credits recommended: 3 or 4

---

Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India
कौशल भारत-कुशल भारत

This certificate is awarded to

DHANUSH I

for successfully completing the course

**Rapid Manufacturing**

with a consolidated score of 70 %

| Online Assignments | 23.13/25 | Proctored Exam | 46.5/75 |
|---|---|---|---|

Total number of candidates certified in this course: 2026

Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

Jul-Oct 2024
(12 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

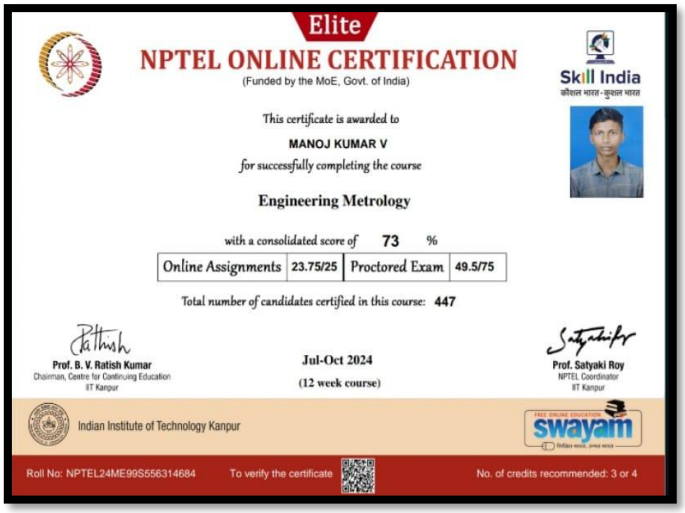
Indian Institute of Technology Kanpur

swayam

Roll No: NPTEL24ME115S856311101 To verify the certificate No. of credits recommended: 3 or 4

This document is an official certificate from the NPTEL (National Programme on Technology Enhanced Learning) online platform, an initiative funded by the Ministry of Education, Government of India. It certifies the successful completion of a 12-week course titled "Rapid Manufacturing," administered by the Indian Institute of Technology Kanpur during the July-October 2024 session.The certification details the academic rigor of the course, which culminated in a proctored examination. The recipient's final standing was determined by a consolidated scoring system that combined performance in regular online assignments, which accounted for a portion of the grade, with the results from the final proctored exam. The course is substantial, with a recommendation of 3 to 4 academic credits, reflecting its depth and the effort required to complete it.To provide context for the course's scale and selectivity, it is noted that a total of 2,026 candidates were ultimately certified. However, this figure represents only those who successfully met the completion criteria. The overall enrollment and participation numbers were significantly higher, with records indicating that only six students formally attended and participated in the full course offering. This low attendance figure highlights the challenging nature of the curriculum and the significant commitment required from participants.The certificate bears the signatures of the course coordinator, Prof. S. K. Bhatnagar from the Office of the Dean of Continuing Education at IIT Kanpur, and includes a unique identification number for verification purposes, ensuring its authenticity. This credential serves as a formal recognition of the dedication and proficiency demonstrated in the field of advanced manufacturing technologies.

# ENGINEERING METROLOGY


Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India

This certificate is awarded to

MANOJ KUMAR V

for successfully completing the course

Engineering Metrology

with a consolidated score of 73 %

| Online Assignments | 23.75/25 | Proctored Exam | 49.5/75 |
|---|---|---|---|

Total number of candidates certified in this course: 447

Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

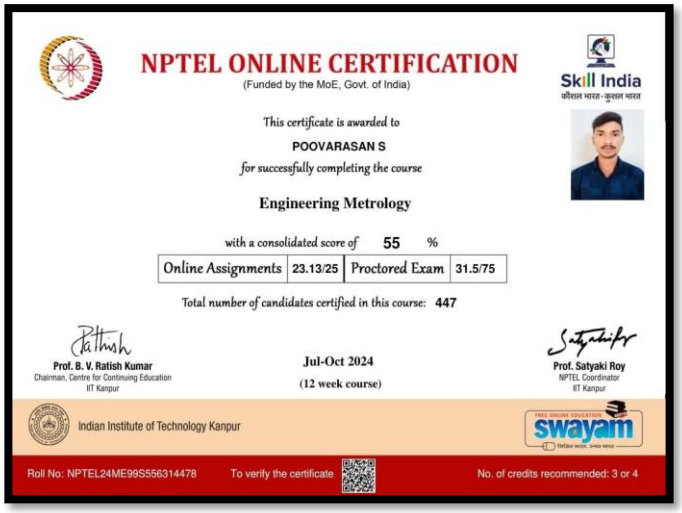
Jul-Oct 2024
(12 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

Indian Institute of Technology Kanpur

swayam

Roll No: NPTEL24ME99S556314684 To verify the certificate No. of credits recommended: 3 or 4


NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India

This certificate is awarded to

POOVARASAN S

for successfully completing the course

Engineering Metrology

with a consolidated score of 55 %

| Online Assignments | 23.13/25 | Proctored Exam | 31.5/75 |
|---|---|---|---|

Total number of candidates certified in this course: 447

Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

Jul-Oct 2024
(12 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

Indian Institute of Technology Kanpur

swayam

Roll No: NPTEL24ME99S556314478 To verify the certificate No. of credits recommended: 3 or 4


NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India

This certificate is awarded to

HUDSON SAFIN Y

for successfully completing the course

Engineering Metrology

with a consolidated score of 54 %

| Online Assignments | 20.94/25 | Proctored Exam | 33/75 |
|---|---|---|---|

Total number of candidates certified in this course: 447

Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

Jul-Oct 2024
(12 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

Indian Institute of Technology Kanpur

swayam

Roll No: NPTEL24ME99S556302730 To verify the certificate No. of credits recommended: 3 or 4


NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India

This certificate is awarded to

NARENDRAN A

for successfully completing the course

Engineering Metrology

with a consolidated score of 55 %

| Online Assignments | 21.88/25 | Proctored Exam | 33/75 |
|---|---|---|---|

Total number of candidates certified in this course: 447

Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

Jul-Oct 2024
(12 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

Indian Institute of Technology Kanpur

swayam

Roll No: NPTEL24ME99S556302924 To verify the certificate No. of credits recommended: 3 or 4

This official certification acknowledges the successful completion of the "Engineering Metrology" course, a comprehensive 12-week program offered from July to October 2024 under the National Programme on Technology Enhanced Learning (NPTEL). An initiative funded by the Ministry of Education, Government of India, and administered by the prestigious Indian Institute of Technology Kanpur, the course is designed to impart advanced knowledge in the critical field of measurement science, which is fundamental to precision engineering, manufacturing, and quality assurance. The certification was awarded based on a stringent two-tier evaluation process, comprising performance in online assignments and a final proctored examination. The candidate demonstrated a strong grasp of the subject matter, achieving a consolidated score of 73%, which was calculated from an excellent assignment score of 23.75 out of 25 and a proctored exam score of 49.5 out of 75. The document is formally authenticated by the signature of Prof. B.V. Ratish Kumar, Chairman of the Centre for Continuing Education at IIT Kanpur, and includes a unique roll number for official verification, ensuring its legitimacy. The course, which carries a recommendation of 3 or 4 academic credits, attracted a significant number of participants, with a total of 447 candidates ultimately receiving certification across the country. Among this wider body of successful participants, a dedicated group of 6 students successfully fulfilled all the academic and evaluative criteria to earn this distinguished credential. This certificate serves as a formal testament to the holder's specialized expertise in engineering metrology, encompassing principles of measurement, instrumentation, and standards, as validated by one of India's leading technological institutes, thereby signifying a notable accomplishment in their professional or academic development.

# STAFF ACHIEVEMENTS

## AICTE TRAINING AND LEARNING (ATAL) ACADEMY

ATAL/2024/1732684457

Skill India
कौशल भारत - कुशल भारत

ATAL

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi -110070

AICTE Training and Learning (ATAL) Academy

*Certificate*

*It is certified that* ***Dr. V.N. Anbazhagan, Associate*** *.* ***ofessor*** *of* ***DMI COLLEGE OF ENGINEERING*** *has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on* ***Advanced Functional Materials: Fabrication, Characterization and Applications*** *at* ***Mepco Schlenk Engineering College, Sivakasi*** *from* ***02/12/2024*** *to* ***07/12/2024.***

N.Selvakumar
Professor Level (AICTE Institute), Coordinator
**Mepco Schlenk Engineering College, Sivakasi**

Dr. Sunil Luthra
Director & Bureau Head
**Training and Learning Bureau, AICTE**

ATAL/2024/1732767865

Skill India
कौशल भारत - कुशल भारत

ATAL

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi -110070

AICTE Training and Learning (ATAL) Academy

*Certificate*

*It is certified that* ***Mr. S.RAJAMAHENDRAN, Assistant Professor*** *of* ***DMI College Of Engineering*** *has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on* ***Advanced Functional Materials: Fabrication, Characterization and Applications*** *at* ***Mepco Schlenk Engineering College, Sivakasi*** *from* ***02/12/2024*** *to* ***07/12/2024.***

N.Selvakumar
Professor Level (AICTE Institute), Coordinator
**Mepco Schlenk Engineering College, Sivakasi**

Dr. Sunil Luthra
Director & Bureau Head
**Training and Learning Bureau, AICTE**

Faculty members from the Department of Mechanical Engineering actively took part in the **AICTE Training and Learning (ATAL) Academy Faculty Development Program (FDP)** on *"Advanced Functional Materials: Fabrication, Characterization, and Applications."* The program was organized at **Mepco Schlenk Engineering College, Sivakasi** from **2nd December 2024 to 7th December 2024**.The participants included **Dr. V.N. Anbazhagan, Associate Professor; Mr.M.Senthilkumaran, Assistant Professor; Mr. S. Rajamahendaran; Mr. S.O. Kaniraj; Mr. P. Saravanan; and Dr. G. Tamilkumaran.** Their active involvement highlighted the department's commitment to academic growth and research-oriented learning.The FDP was designed to provide faculty members with comprehensive knowledge of **functional materials** and their **fabrication processes, advanced characterization techniques, and wide-ranging applications** in various engineering domains. The sessions included lectures, hands-on training, and interactive discussions led by experts from academia and industry. The focus was on bridging theoretical understanding with practical insights, enabling faculty to incorporate advanced material science concepts into teaching and research.Participation in this FDP significantly benefited the faculty members by enhancing their expertise in emerging areas of material science and engineering. It also created opportunities for networking, collaboration, and exploring interdisciplinary applications of functional materials in real-world problems.Overall, the successful completion of this one-week FDP by the faculty members demonstrates their dedication to continuous professional development. The knowledge and skills acquired will undoubtedly enrich classroom teaching, strengthen departmental research activities, and contribute to the academic excellence of the institution

# SUSTAINABLE MANUFACTURING TECHNOLOGIES: ADDITIVE, COATING, SUBTRACTIVE, AND HYBRID

UNIVERSITY WEST

GIAN
GLOBAL INITIATIVE OF ACADEMIC NETWORKS

Ministry of Education
Government of India

Certificate of Participation

This is to certify that Dr. A Amala Mithin Minther Singh

from DMI College of Engineering, Chennai has participated in the course entitled

"SUSTAINABLE MANUFACTURING TECHNOLOGIES: ADDITIVE, COATING, SUBTRACTIVE AND HYBRID"

during 25-29th November 2024

organized by the

Department of Mechanical Engineering

National Institute of Technology Warangal

Prof. Bidyadhar Subudhi
Director, NITW

Prof. S Srinivasa Rao
Local Coordinator (GIAN)

Prof. A Venu Gopal
Course coordinator

Dr. A. Amala Mithin Minther Singh from **DMI College of Engineering, Chennai** participated in the GIAN course on *"Sustainable Manufacturing Technologies: Additive, Coating, Subtractive, and Hybrid"* organized by the **Department of Mechanical Engineering, NIT Warangal** from **25th to 29th November 2024**.The program focused on modern and sustainable approaches to manufacturing, highlighting **additive manufacturing, coating processes, subtractive machining, and hybrid methods**. Experts delivered lectures and case studies on how these technologies improve efficiency, reduce material waste, and contribute to environmentally responsible engineering practices.Through interactive sessions, participants gained exposure to **fabrication techniques, process optimization, and applications** of sustainable methods across industries. The course also emphasized the global importance of adopting eco-friendly and resource-efficient technologies.The knowledge acquired will support Dr. Amala Mithin Minther Singh in enhancing academic teaching, research, and guiding students toward innovative, sustainable engineering solutions

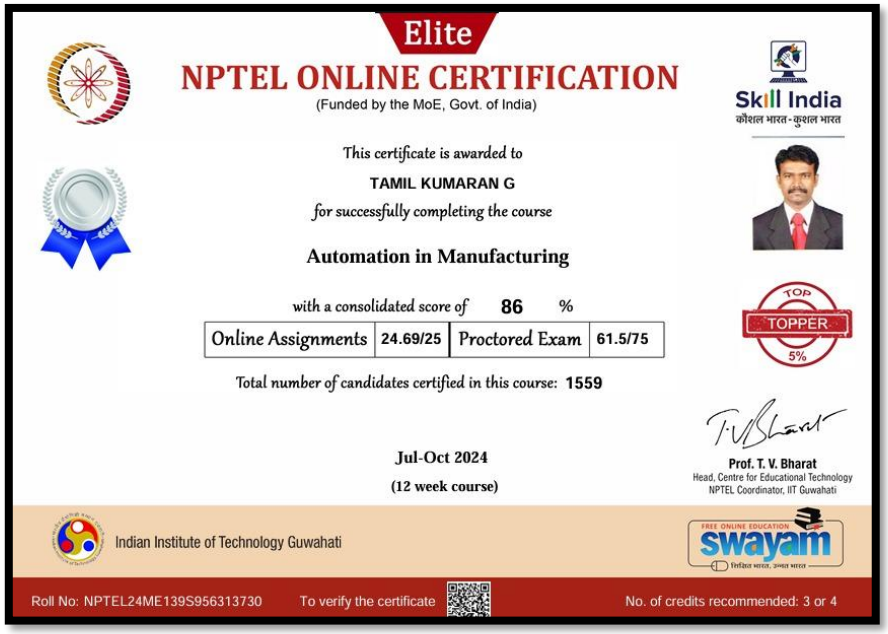
# NPTEL BELIEVER AWARD



| Course Type | Course Name | Duration | Offering Institute | Course Timeline | Marks Obtained (Out of 100) | QR Code |
|---|---|---|---|---|---|---|
| core | Effective Engineering Teaching In Practice | 4 weeks | IIT Madras | Jan-Feb 2023 | 70 | |
| core | Ethics in Engineering Practice | 8 weeks | IIT Kharagpur | Aug-Oct 2024 | 73 | |
| core | Introduction To Professional Scientific Communication | 4 weeks | IIT Kanpur | Jan-Feb 2024 | 71 | |
| core | Teaching And Learning In General Programs: Talg | 4 weeks | IISc Bangalore | Jul-Aug 2023 | 60 | |
| core | Accreditation and Outcome Based Learning | 8 weeks | IIT Kharagpur | Aug-Oct 2022 | 61 | |
| Elective | Development Research Methods | 8 weeks | IIT Guwahati | Aug-Oct 2024 | 63 | |
| Elective | Educational leadership | 8 weeks | IIT Kharagpur | Jul-Sep 2022 | 90 | |
| Elective | Training of Trainers | 12 weeks | IIT Roorkee | Jul-Oct 2024 | 72 | |
| Elective | Training and Development | 12 weeks | IIT Kharagpur | Jan-Apr 2024 | 84 | |
| Elective | Leadership and Team Effectiveness | 12 weeks | IIT Roorkee | Jan-Apr 2023 | 68 | |
| Total Marks | | | | | 712 | |

Dr. A. Amala Mithin Minther Singh, faculty member of DMI College of Engineering, Chennai, achieved significant recognition in the **NPTEL July–December 2024 session** by receiving multiple prestigious awards. He was honored with the **NPTEL Believer Award**, the **NPTEL Champion Recognition**, and was acknowledged as a **Faculty Domain Expert in Advanced Studies** under the Faculty Domain Certification scheme.To earn the Faculty Domain Advanced certification, Dr. Amala Mithin Minther Singh successfully completed a series of **core and elective courses** through NPTEL-SWAYAM offered by premier IITs. These included courses on *Effective Engineering Teaching in Practice, Ethics in Engineering, Introduction to Professional Scientific Communication, Teaching and Learning in General Programs, Accreditation and Outcome-Based Learning, Development Research Methods, Educational Leadership, Training of Trainers, Training and Development,* and *Leadership and Team Effectiveness.* The certifications demonstrated his commitment to continuous professional development, advanced pedagogy, and leadership in education.Through consistent dedication, he not only completed these rigorous courses but also excelled with commendable scores, accumulating a total of **712 marks** across different programs. This achievement reflects his pursuit of excellence in teaching, research methodologies, and institutional development.The recognitions highlight Dr. Amala Mithin Minther Singh's strong engagement with technology-enabled learning and his role in integrating innovative teaching methods into higher education. His achievements not only enhance his professional profile but also serve as an inspiration for fellow faculty and students to embrace lifelong learning and academic excellence.

# AUTOMATION IN MANUFACTURING




This certification marks the successful completion of the 12-week NPTEL course "Automation in Manufacturing," offered by IIT Guwahati from July to October 2024. Funded by India's Ministry of Education, the course provided advanced training in industrial automation, a cornerstone of modern Industry 4.0 practices. To earn this credential, the candidate underwent a rigorous evaluation, excelling with a consolidated score of 86%. This impressive result was built upon a near-perfect assignment score (24.69/25) and a strong proctored exam performance (61.5/75). The certificate, verifiable via a unique roll number, carries a recommendation of 3-4 academic credits, attesting to its substantive value. Within a large cohort of 1,559 certified professionals nationwide, this achievement validates the holder's specialized expertise in automated systems, robotics, and smart manufacturing technologies. It serves as a significant credential, enhancing the recipient's qualifications for the rapidly evolving manufacturing sector.

# MATERIALS PROCESSING

# (CASTING, FORMING AND WELDING)

Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India
कौशल भारत-कुशल भारत

This certificate is awarded to

TAMIL KUMARAN G

for successfully completing the course

Materials Processing (Casting, Forming and Welding)

with a consolidated score of 77 %

| Online Assignments | 23.44/25 | Proctored Exam | 54/75 |
|---|---|---|---|

Total number of candidates certified in this course: 158

Jul-Oct 2024

(12 week course)

Prof. T. V. Bharat
Head, Centre for Educational Technology
NPTEL Coordinator, IIT Guwahati

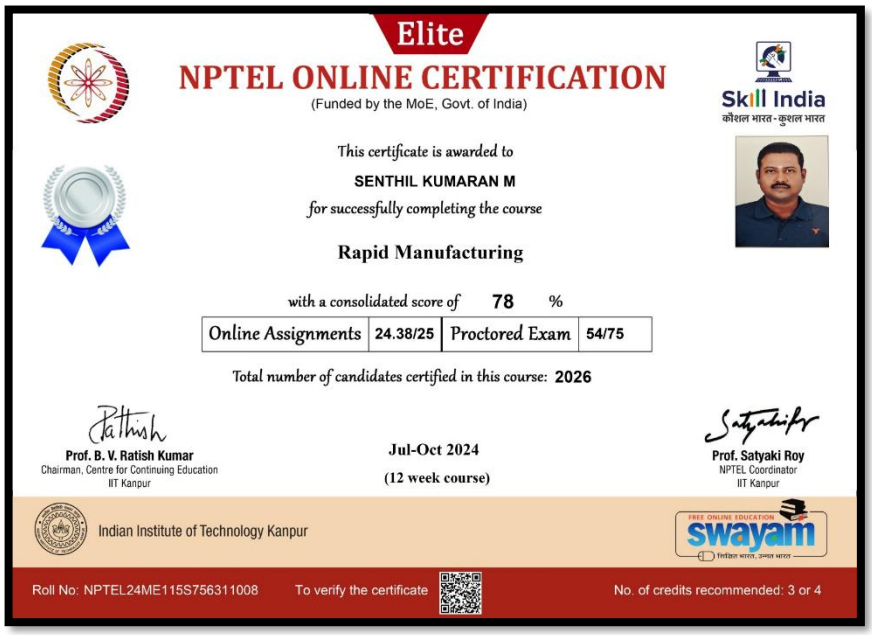
Indian Institute of Technology Guwahati

swayam

Roll No: NPTEL24ME108S656314537 To verify the certificate No. of credits recommended: 3 or 4

This certification acknowledges the successful completion of the 12-week NPTEL course, "Materials Processing (Casting, Forming and Welding)," conducted by the Indian Institute of Technology Guwahati from July to October 2024. As an initiative funded by the Ministry of Education, Government of India, the course delivered in-depth knowledge of fundamental and advanced manufacturing processes essential to modern engineering. The candidate demonstrated a strong command of the subject, achieving a consolidated score of 77%, derived from excellent performance in online assignments (23.44/25) and the proctored examination (54/75). The certificate, bearing the endorsement of Prof. T.V. Bharat, Head of the Centre for Educational Technology and NPTEL Coordinator at IIT Guwahati, is verifiable through a unique roll number and carries a recommendation of 3-4 academic credits. This accomplishment is particularly notable within a select group of 158 certified professionals, highlighting the holder's specialized proficiency in critical material shaping and joining techniques.

# RAPID MANUFACTURING



Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India
कौशल भारत-कुशल भारत

This certificate is awarded to

SENTHIL KUMARAN M

for successfully completing the course

Rapid Manufacturing

with a consolidated score of 78 %

| Online Assignments | 24.38/25 | Proctored Exam | 54/75 |
|---|---|---|---|

Total number of candidates certified in this course: 2026

Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

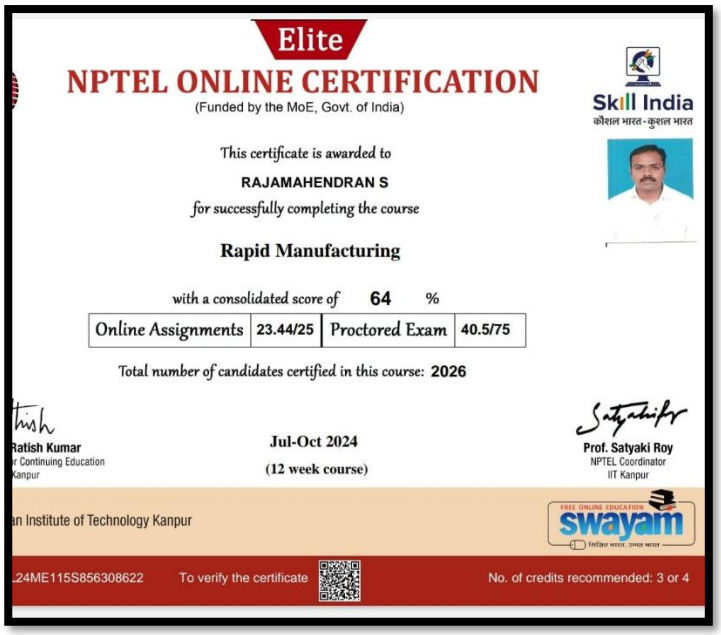
Jul-Oct 2024
(12 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

Indian Institute of Technology Kanpur

swayam

Roll No: NPTEL24ME115S756311008 To verify the certificate No. of credits recommended: 3 or 4



Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India
कौशल भारत-कुशल भारत

This certificate is awarded to

RAJAMAHENDRAN S

for successfully completing the course

Rapid Manufacturing

with a consolidated score of 64 %

| Online Assignments | 23.44/25 | Proctored Exam | 40.5/75 |
|---|---|---|---|

Total number of candidates certified in this course: 2026

Ratish Kumar
Continuing Education
Kanpur

Jul-Oct 2024
(12 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

an Institute of Technology Kanpur

swayam

24ME115S856308622 To verify the certificate No. of credits recommended: 3 or 4

Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India
कौशल भारत-कुशल भारत

This certificate is awarded to

ANBAZHAGAN

for successfully completing the course

Fundamentals of Manufacturing Processes

with a consolidated score of 60 %

| Online Assignments | 22.5/25 | Proctored Exam | 37.5/75 |
|---|---|---|---|

Total number of candidates certified in this course: 584

Prof. Kaushik Ghosh,
Professor(Chemistry)
Coordinator CEC

Jul-Oct 2024
(12 week course)

Prof. Ranjana Pathania,
Professor (BSBE)
Coordinator (NPTEL)

Indian Institute of Technology Roorkee

swayam

Roll No: NPTEL24ME123S952503547 To verify the certificate No. of credits recommended: 3 or 4

This official certification from the National Programme on Technology Enhanced Learning (NPTEL) confirms the successful completion of the advanced 12-week course on "Rapid Manufacturing," conducted from July to October 2024. Funded by the Ministry of Education, Government of India, and administered through the prestigious Indian Institute of Technology Kanpur, this program is dedicated to exploring cutting-edge additive manufacturing and rapid prototyping technologies that are revolutionizing production processes across industries. The certification process involved a comprehensive evaluation system, balancing continuous assessment through online assignments with a final proctored examination. The candidate demonstrated exceptional proficiency in the subject matter, achieving a consolidated score of 78%, which reflects outstanding performance in the online assignments (24.38 out of 25) and a solid result in the proctored examination (54 out of 75). The document carries significant academic weight, bearing the official endorsement of Prof. B. V. Batish Kumar, Chairman of the Centre for Continuing Education at IIT Kanpur, and Prof. Satyaki Roy, the NPTEL Coordinator at the institute. It includes a unique verification number (NPTEL2AME1165768311008) for authentication purposes and carries a recommendation of 3-4 academic credits, underscoring its substantial curricular value. The course attracted widespread participation, with a total of 2026 candidates receiving certification nationwide, indicating the growing importance of rapid manufacturing skills in the contemporary industrial landscape. Particularly noteworthy is that among this large cohort, four staff members successfully completed the rigorous course requirements, highlighting the program's relevance for both academic and professional development. This achievement signifies the holder's advanced understanding of additive manufacturing principles, 3D printing technologies, and their practical applications in modern industrial settings, as validated by one of India's premier technological institutions. The certificate serves as a valuable credential that enhances the professional profile of the recipient, demonstrating specialized expertise in a field that is critical to innovation, customized production, and reducing time-to-market in today's competitive manufacturing environment.