



5.5 Innovation by the Faculty in Teaching and Learning

The CSE Department at Sri Venkateshwarraa College of Engineering & Technology is committed to adopting innovative teaching and learning methodologies to enhance student engagement, understanding, and real-world application of knowledge. Faculty members incorporate technology-driven, research-oriented, and industry-aligned teaching strategies to improve the learning experience.

1. Technology-Enabled Learning Approaches

➤ Flipped Classroom Methodology

- Each Units Notes, Question bank and Lab manual are shared to Students.

Fwd: CH&NTS NOTES & MANUAL Inbox x

H **HOD CSE SVCET** <hod.cse@svcet.ac.in>
to CSE ▾

----- Forwarded message -----
From: **HOD CSE SVCET** <hod.cse@svcet.ac.in>
Date: Thu, 30 Dec, 2021, 1:55 pm
Subject: CH&NTS NOTES & MANUAL
To: <cse-2018-2022@svcet.ac.in>

Dear Students,
Good afternoon, herewith i have attached CH&NTS Notes for your view, PFA..

Thanks & Regards,
Dr. N. BALAJI, D.C.T., B.Tech., M.E., Ph.D.,
PROFESSOR & HEAD,
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING,
SRI VENKATESHWARAA COLLEGE OF ENGINEERING AND TECHNOLOGY,
ARIYUR,
PUDUCHERRY - 605 102.
Mobile: +91-9944199803

software engineering 3,4,5 unit notes Inbox x Print Share

D **Dean SVCET** <dean@svcet.ac.in> Mon, Nov 27, 2023, 9:41 AM Star Reply More
to ASHOK, JAYA, ABINAYA, AHFIFA, AJAI, ARAVINDHAN, DHANASEGARAN, DATCHANY, DEEPIGA, DEVANAND, DINESH, DINESH, DURGADEVI, GOPIKRISHNAN, GOWSIGANE, GUNAL, HARA ▾
software engineering 3,4,5 unit notes

7 Attachments • Scanned by Gmail Download Refresh

- Unit 4 QB SE.pdf
- SE all unit 2 mark...
- UNIT_3_Two mark...
- Unit_4_notes_fin...
- UNIT V.docx
- Unit-3
- Unit-3_objective....
- Unit-3_updated_...



- Classroom sessions focus on interactive discussions, problem-solving, and case studies.



- Encourages self learning and improves critical thinking.





➤ Blended Learning (Online & Offline Integration)

- Every classroom is equipped with five interactive Projectors, Audios and Videos System and One smart board in Seminar Hall.



2. Outcome-Based Education (OBE) Strategies

➤ Problem-Based Learning (PBL)

- Encouraging students to research, analyze, and develop solutions collaboratively.

➤ Project-Based Learning (Mini & Major Projects)

- Interdisciplinary projects integrated into curriculum and evaluated by Faculties.
- Students work on AI, ML, Cybersecurity, IoT, and Block Chain based projects.

➤ Design Thinking & Innovation Challenges

- Faculties coordinated the workshops for creative problem-solving for real world challenges.





Workshops:



- Encouraged students to participate in Smart India Hackathon, Boot camps and Ideathon Challenges.

Smart India Hackathon:





Boot camps:





3. Industry-Integrated Learning Approaches

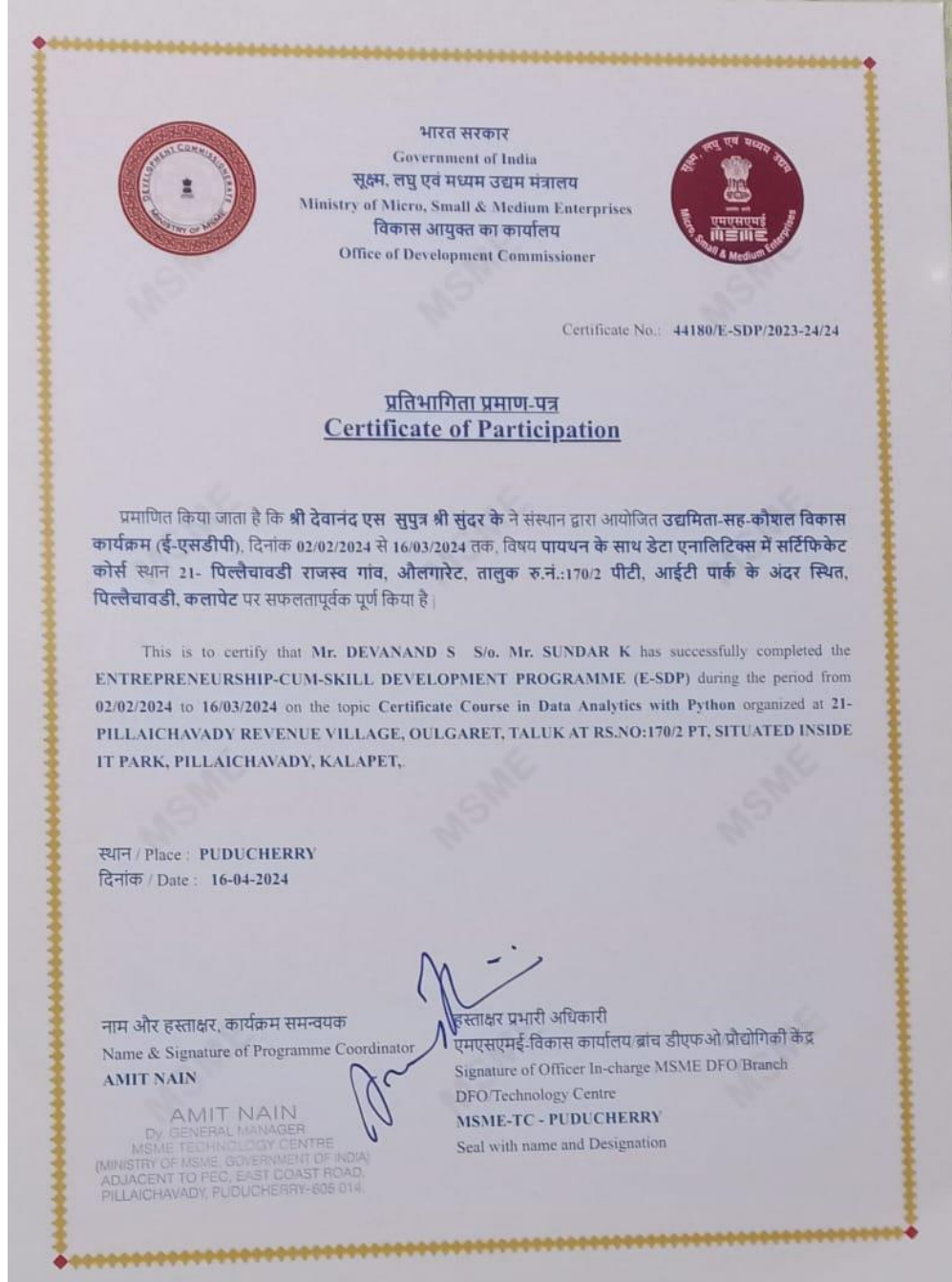
- Online Certifications (AICTE Eduskills, MSME , ICT Academy)

AICTE Eduskills





MSME

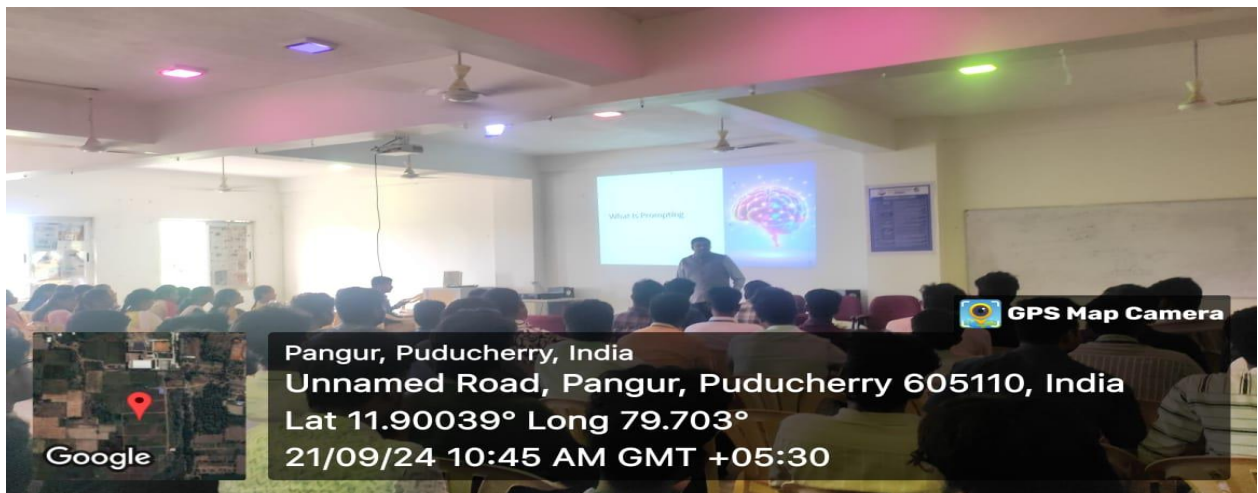




➤ Industry Expert Sessions & Hands-On Workshops

- Regular guest lectures, coding boot camps, and technical workshops by IT professionals.

Guest lectures:





Coding boot camps:



Technical workshops:





- Focus on AI, Cloud, Cybersecurity, Block chain, and Web Technology.

Cyber security:



The poster features a dark blue background with a network of glowing blue nodes and lines. At the top, it includes the college's logo and accreditation marks. The central text is white and yellow, announcing a guest lecture. A circular portrait of the speaker is positioned in the middle. Below the portrait, a light blue box contains his name and title. At the bottom, three icons (calendar, clock, and speaker) precede the date, time, and location. A URL is provided in the bottom right corner.

srivenkateshwaraa
College of Engineering & Technology
ASPIRE TO EXCEL
Ariyur, Puducherry-605 102.

ACCREDITED WITH GRADE **A** NAAC

ISO 21001

DEPARTMENT OF
COMPUTER SCIENCE AND ENGINEERING
CONDUCTING GUEST LECTURE
ON

**"UNLOCKING THE FUTURE: EXPLORING A
CAREER IN CYBERSECURITY"**

Mr. Mohammed Thowfeeq
IT Security Analyst
Markerstudy Group
United Kingdom

📅 2nd AUGUST 2024
🕒 10 am to 12 pm
🎤 MBA Seminar Hall

<https://svcet.ac.in>



Block chain:

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ORGANIZES

One Day Workshop On

“BUILDING INTERACTIVE APP USING BLOCKCHAIN”

Resource Person
Mr. Chaal Pritam
Founder
Web3 Chennai & Jezer Labs
Chennai.

DATE: 29th July 2024
VENUE: CSE Seminar Hall

Participants

CSE STUDENTS

Convener: **Dr. N. Balaji**
Dean- Academics cum HOD - CSE

Co-Convener: **Dr. K. Andal**
Asst. Prof - CSE

Program Coordinator: **Ms. S. Pavithra**
Asst. Prof - CSE

IIC: **Mrs. G. Rajeswari**
Asst. Prof - CSE

Workshop on AI:





4. Continuous Assessment & Innovative Evaluation Methods

➤ Gamification in Learning

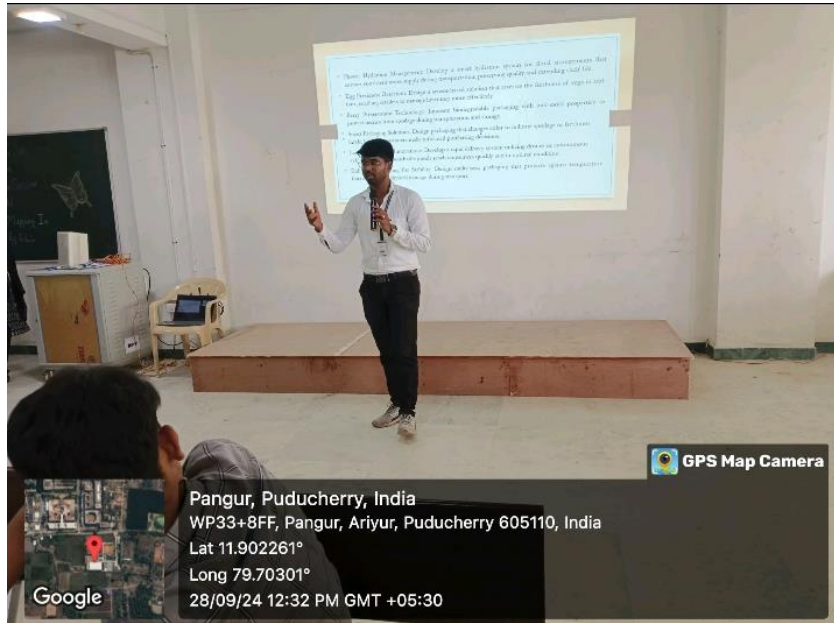
- Use of coding contests, quizzes, and leaderboard systems to make learning competitive.

Quizzes:





Coding contests:



➤ Rubric-Based Project Evaluations

- Defined assessment rubrics for coding projects, research assignments, and Seminar.
- Ensures consistent grading and objective evaluation of student performance.

Rubrics for Project Review (Out of 50 Marks)

PHASE I (Out of 200 marks)

Criteria	Weightage (Marks)	Description
Zereth Review (30 Marks)		Focus: Problem Identification & Initial Study
Presentation	10	Clarity in explaining the problem statement, objectives, and literature survey.
Report	10	Documentation quality, including problem definition and background research.
Queries	5	Ability to address faculty/mentor queries about feasibility and relevance.
Result & Conclusion	5	Justification of the problem statement and expected outcomes.



First Review (50 Marks)		Focus: System Design & Approach
Presentation	15	Explanation of system design, methodology, and technology choices.
Report	15	Detailed requirement analysis, design diagrams, and progress documentation
Queries	10	Clarity in answering technical questions related to design and feasibility.
Result & Conclusion	10	Justification of design decisions and expected functionality.
Second Review (60 Marks)		Focus: Development & Testing Progress
Presentation	20	Demonstration of project development, implementation status, and testing.
Report	15	Submission of detailed progress reports, coding standards, and test cases.
Queries	10	Ability to answer queries related to implementation, challenges, and improvements.
Result & Conclusion	15	Partial results, performance evaluation, and next steps for completion.
Model Review (60 Marks)		Focus: Final Demonstration & Evaluation
Presentation	20	Final demonstration of the working model with clear explanation.
Report	15	Comprehensive project documentation, including results and findings.
Queries	10	Effectiveness in handling queries on functionality, challenges, and future scope.
Result & Conclusion	15	Overall project outcomes, practical implementation, and conclusion.



Rubrics for Project Review

PHASE II (Out of 600 marks)

Criteria	Weightage (Marks)	Description
Zeroth Review (100 Marks)		Focus: Problem Refinement & Planning
Presentation	30	Clear explanation of refined problem statement, objectives, and methodology.
Report	30	Well-structured documentation including problem definition, feasibility, and literature survey.
Queries	20	Ability to justify project goals, feasibility, and approach.
Result & Conclusion	20	Initial expected outcomes and justification of project feasibility.
First Review (150 Marks)		Focus: System Architecture & Initial Development
Presentation	50	Explanation of system architecture, methodology, and progress in implementation.
Report	40	Submission of detailed system design, requirement analysis, and progress documentation.
Queries	30	Ability to answer technical queries on design, approach, and feasibility.
Result & Conclusion	30	Justification of design choices, early-stage implementation results, and further steps.
Second Review (200 Marks)		Focus: Development, Testing & Performance
Presentation	70	Demonstration of the developed system, testing outcomes, and performance evaluation.
Report	50	Comprehensive progress report including coding standards,



		debugging, and test cases.
Queries	40	Ability to handle technical queries related to implementation, performance, and improvements.
Result & Conclusion	40	Analysis of partial outcomes, system performance, and next-phase goals.
Model Review (150 Marks)		Focus: Final Evaluation & Practical Application
Presentation	50	Final demonstration of the working project with real-world application insights.
Report	40	Final demonstration of the working project with real-world application insights.
Queries	30	Effectiveness in handling queries on functionality, challenges, and future scope.
Result & Conclusion	30	Final project outcomes, validation of results, and conclusion.

5. Research & Innovation-Driven Teaching

➤ Faculty-Led Research Mentorship

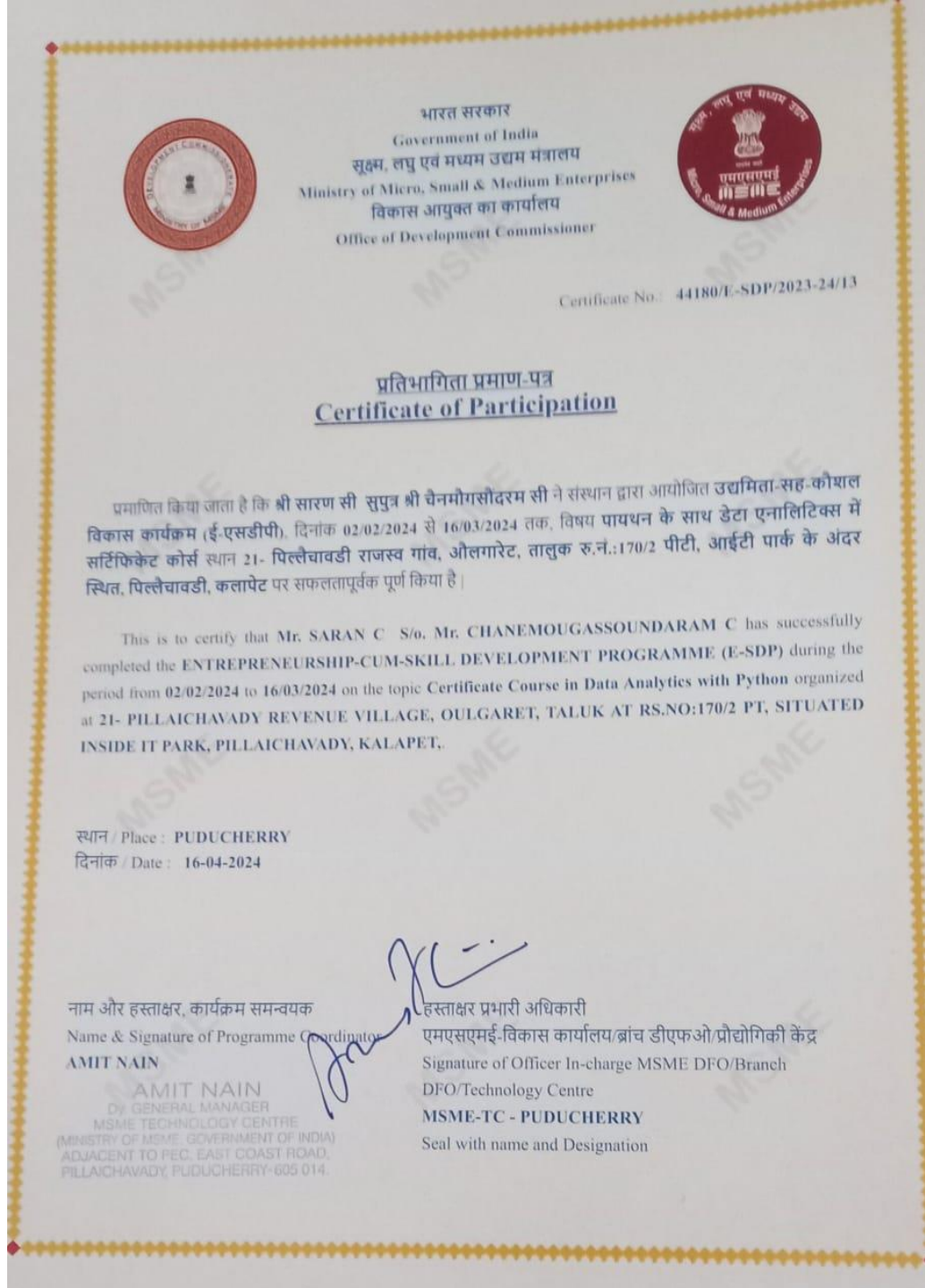
- Encouraging students to publish research papers in IEEE, Springer, Scopus-indexed journals and International Conferences.
- Faculties guiding the students in patent filing and product development.

➤ Hackathons & Startup Incubation Support



- Faculty mentor students for Govt. Start-up Challenges and MSME innovation grants.



MSME innovation:







भारत सरकार
Government of India
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय
Ministry of Micro, Small & Medium Enterprises
विकास आयुक्त का कार्यालय
Office of Development Commissioner

Certificate No.: 44180/E-SDP/2023-24/24

प्रतिभागिता प्रमाण-पत्र
Certificate of Participation

प्रमाणित किया जाता है कि श्री देवानंद एस सुपुत्र श्री सुंदर के ने संस्थान द्वारा आयोजित उद्यमिता-सह-कौशल विकास कार्यक्रम (ई-एसडीपी), दिनांक 02/02/2024 से 16/03/2024 तक, विषय पायथन के साथ डेटा एनालिटिक्स में सर्टिफिकेट कोर्स स्थान 21- पिल्लैचावडी राजस्व गांव, औलगारेट, तालुक रु.नं.:170/2 पीटी, आईटी पार्क के अंदर स्थित, पिल्लैचावडी, कलापेट पर सफलतापूर्वक पूर्ण किया है।

This is to certify that Mr. DEVANAND S S/o. Mr. SUNDAR K has successfully completed the ENTREPRENEURSHIP-CUM-SKILL DEVELOPMENT PROGRAMME (E-SDP) during the period from 02/02/2024 to 16/03/2024 on the topic Certificate Course in Data Analytics with Python organized at 21-PILLAICHAVADY REVENUE VILLAGE, OULGARET, TALUK AT RS.NO:170/2 PT, SITUATED INSIDE IT PARK, PILLAICHAVADY, KALAPET,

स्थान / Place : PUDUCHERRY
दिनांक / Date : 16-04-2024

नाम और हस्ताक्षर, कार्यक्रम समन्वयक
Name & Signature of Programme Coordinator
AMIT NAIN

हस्ताक्षर प्रभारी अधिकारी
एमएसएमई-विकास कार्यालय/ब्रांच डीएफओ प्रौद्योगिकी केंद्र
Signature of Officer In-charge MSME DFO/Branch
DFO/Technology Centre
MSME-TC - PUDUCHERRY
Seal with name and Designation

AMIT NAIN
Dy. GENERAL MANAGER
MSME TECHNOLOGY CENTRE
(MINISTRY OF MSME, GOVERNMENT OF INDIA)
ADJACENT TO PEC, EAST COAST ROAD,
PILLAICHAVADY, PUDUCHERRY-605 014.



Smart India Hackathon



- Every year faculties will be encouraging students to participate in U-MAGINE conference.


U-MAGINE conference:





6. Faculty Certifications in NPTEL

- Faculty members have completed and currently pursuing NPTEL certification courses to enhance the quality of education and improve their teaching skills.
- Four Faculties in Industry 4.0&IoT, Four Faculties in Machine Learning, One faculty in Cyber security and One faculty in Database management System.



Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

This certificate is awarded to

N BALAJI

for successfully completing the course



Introduction to Industry 4.0 and Industrial Internet of Things

with a consolidated score of **67** %


Online Assignments	24.78/25	Proctored Exam	42/75
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Total number of candidates certified in this course: **15725**


Jul-Oct 2024
(12 week course)





H. Banerji
Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CS95S457400802 To verify the certificate  No. of credits recommended: 3 or 4



NPTEL-AICTE Faculty Development Programme

(Funded by the MoE, Govt. of India)



This certificate is awarded to

DR K ANDAL

for successfully completing the course
**Introduction to Industry 4.0 and Industrial
Internet of Things**
with a consolidated score of **72 %**

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras



(Jul-Oct 2024)

Roll No: NPTEL24CS95S357400744

Duration of NPTEL course : 12 Weeks

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams. This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated, 16th Nov, 2023, similar to other refresher / orientation courses. F.No. AICTE / RIFD / FDP through MOOCs / 2023



Elite NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

This certificate is awarded to

VINITHA S

for successfully completing the course

**Introduction to Industry 4.0 and Industrial
Internet of Things**

with a consolidated score of **76 %**

Online Assignments	25/25	Proctored Exam	51/75
--------------------	-------	----------------	-------

Total number of candidates certified in this course: 15725

Jul-Oct 2024
(12 week course)



Skill India
कोशल भारत - कुशल भारत



Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CS95S357400768

To verify the certificate



No. of credits recommended: 3 or 4



Elite
NPTEL ONLINE CERTIFICATION
(Funded by the MoE, Govt. of India)



This certificate is awarded to
PAVITHRA S
for successfully completing the course

Introduction to Machine Learning

with a consolidated score of **60** %

Online Assignments	20.42/25	Proctored Exam	39.27/75
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Total number of candidates certified in this course: **6812**

Jul-Sep 2024
(8 week course)

H Banerji
Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CS81S333500062

To verify the certificate



No. of credits recommended: 2 or 3



Elite
NPTEL ONLINE CERTIFICATION
(Funded by the MoE, Govt. of India)



This certificate is awarded to
PAVITHRA S
for successfully completing the course

**Introduction to Industry 4.0 and Industrial
Internet of Things**

with a consolidated score of **60** %

Online Assignments	25/25	Proctored Exam	34.5/75
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Total number of candidates certified in this course: **15725**

Jul-Oct 2024
(12 week course)

H Banerji
Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL24CS95S457400813

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

VINITHA S

for successfully completing the course

Introduction to Machine Learning

with a consolidated score of **58** %

Online Assignments	22.46/25	Proctored Exam	35.21/75
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Total number of candidates certified in this course: **3449**

Jul-Sep 2023

(8 week course)

Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL23CS87S35190765

To verify the certificate



No. of credits recommended: 2 or 3

Through technology-enhanced teaching, research-driven learning, and industry-aligned methodologies, the faculty ensures that students gain holistic knowledge, problem-solving skills, and industry readiness. These innovations in teaching and learning contribute to academic excellence, skill development, and career growth.