



DURATION
6 Months

IT, AI & SOFTWARE DEVELOPMENT

COURSE & CAREER GUIDE · 2026

Professional Diploma in **Artificial Intelligence**

Course Details & Career Growth Guide

The complete AI diploma — maths, ML, deep learning, NLP, CV, reinforcement learning, MLOps and responsible AI.

480 Training Hours

10 Modules

5 Hands-On Projects

Career Roles & Salary Ladder

Placement Support

What's Inside

INTRODUCTION

About IPCS Global & the IT, AI & Software Development Stream	3
Industry Outlook & Where You Can Work	4

PART A — COURSE DETAILS

Program Overview, Key Facts & Eligibility	5
The Full Syllabus	6
Module-by-Module Topics	6
Tools, Projects & Assessment	7

PART B — CAREER GROWTH

Job Roles You'll Be Ready For	9
Growth Ladder & Salary Progression	9
Skills, Certifications & Upgrade Path	10

TRAINING, CERTIFICATION & PLACEMENT

How We Train, Certification & Career-Readiness	11
How IPCS Global Gets You Hired	12
Why IPCS Global & Meet Our Team	13
Frequently Asked Questions	14
Contact & How to Enrol	15

● Programme Highlights

480 Hours

6 Months of structured,
practical training

5 Projects

Hands-on work you can
show employers

Certified

TÜV SÜD + IPCS Global

Placement

100% placement
assistance & career-
readiness

IPCS Global — Since 2008

IPCS Global began in 2008 as a specialised industrial automation training and services provider and has grown into one of India's leading technical and digital skills institutes, with 50+ branches across India and the GCC. Our Coimbatore centre in Peelamedu combines classroom teaching with hands-on labs, and every learner is coached in communication, aptitude and interview readiness alongside technical skills.

18+

YEARS

15,000+

PROFESSIONALS TRAINED

50+

BRANCHES

100%

PLACEMENT ASSISTANCE

About the IT, AI & Software Development Stream

From AI and data science to full stack development and QA automation, our IT programmes are built around real projects and portfolios — so you graduate able to show employers what you can build, not just what you studied.



ISO 9001:2015 Certified

Audited, consistent training quality.



TÜV SÜD Cooperation Partner

Partner of the German testing & certification body.



NSDC Approved Partner

Approved training partner under Skill India.



Inside the IPCS Global Coimbatore training centre.

Why IT, AI & Software Development, **Why Now**

The demand behind this programme — and the industries that hire our graduates.

- 1 Software runs every business**
Banks, hospitals, retailers and startups all need web applications, data pipelines and quality assurance — creating steady demand for skilled developers and analysts.
- 2 AI and data are the new core**
Companies are investing heavily in AI, analytics and automation. Candidates who can build with data and AI stand out immediately.
- 3 Skills beat degrees**
IT hiring increasingly tests what you can build. A strong project portfolio and GitHub profile can open doors regardless of your academic background.

Where You Can Work

- 1 IT services & consulting**
- 2 Product companies & SaaS**
- 3 Startups**
- 4 Banking, finance & insurance (BFSI)**
- 5 Healthcare & e-commerce**
- 6 Global capability centres (GCCs)**

Three Ways to Build Your Career

Full-Time Job

Join a company with placement support behind you — stability and structured growth.

Job + Freelance

Hold a job while taking side projects to build income and a broader portfolio.

Remote & Global

IT skills are the most globally portable: remote roles, freelance projects and overseas opportunities (GCC, Europe, US, Singapore) are all realistic with experience and a strong portfolio.

CAREER PROGRAMME

Professional Diploma in Artificial Intelligence

The complete AI diploma — maths, ML, deep learning, NLP, CV, reinforcement learning, MLOps and responsible AI.

6 Months

480 Hours

10 Modules

5 Projects

Classroom / Online / Hybrid

Part A • Course Details

Program Overview

Our most in-depth AI programme. With the maths behind AI, extensive machine learning and deep learning, NLP, computer vision, reinforcement learning, MLOps and responsible AI, you graduate able to build, deploy and explain real AI systems — with a 60-hour capstone to prove it.

DURATION

6 Months

TRAINING HOURS

480 Hours

MODULES

10 Structured Modules

MODE

Classroom / Online / Hybrid

BATCHES

Weekday • Weekend • Fast-track

CERTIFICATION

TÜV SÜD + IPCS Global

Who Should Join

- ✓ Engineering, science & computer application graduates
- ✓ Developers & analysts moving into AI
- ✓ Final-year students
- ✓ Professionals building AI products

Eligibility: Degree in engineering, science or computer applications (final-year students welcome).

What You'll Be Able To Do

- ✓ Apply linear algebra, calculus and statistics to ML
- ✓ Build and evaluate ML and deep learning models
- ✓ Build NLP, LLM and computer vision solutions
- ✓ Train reinforcement learning agents
- ✓ Deploy and monitor models with MLOps
- ✓ Apply responsible, ethical AI practices

The Full Syllabus

10 modules, 480 hours, delivered in three phases that each build on the last.

01 · FOUNDATION

Modules 1–2 · 80 Hours

Python and the maths behind AI.

02 · CORE AI

Modules 3–7 · 290 Hours

ML, deep learning, NLP, computer vision and reinforcement learning.

03 · PRODUCTION

Modules 8–10 · 110 Hours

MLOps, responsible AI and a full capstone.

01	Introduction to AI & Python	40 Hrs
02	Mathematics for AI	40 Hrs
03	Machine Learning	80 Hrs
04	Deep Learning	80 Hrs
05	Natural Language Processing (NLP)	60 Hrs
06	Computer Vision (CV)	40 Hrs
07	Reinforcement Learning	30 Hrs
08	MLOps & Deployment	30 Hrs
09	Responsible AI	20 Hrs
10	AI Capstone Project	60 Hrs

Total Training Duration

480 Hours

Module-by-Module Topics

MODULE 01

40 Hrs

Introduction to AI & Python

- AI history, types & applications
- Python syntax, data types & operators
- Control flow, functions & modules
- Lists, tuples, dictionaries & sets
- OOP: classes, inheritance, polymorphism

MODULE 02

40 Hrs

Mathematics for AI

- Linear algebra: vectors & matrices
- Calculus & gradient descent
- Probability & statistics
- Optimisation basics

MODULE 03

80 Hrs

Machine Learning

- Supervised learning: regression & classification
- Unsupervised learning: clustering & PCA
- Decision trees, random forests & boosting
- Model evaluation & cross-validation
- Feature engineering & pipelines (scikit-learn)

MODULE 04

80 Hrs

Deep Learning

- Neural network fundamentals
- TensorFlow / Keras & PyTorch
- CNNs for images
- RNNs, LSTMs & sequence models
- Transfer learning & tuning

MODULE 05

60 Hrs

Natural Language Processing (NLP)

- Text preprocessing & embeddings
- Sentiment analysis & classification
- Transformers & BERT
- Large language models & prompting
- Retrieval-augmented generation (RAG) basics

MODULE 06

40 Hrs

Computer Vision (CV)

- Image processing with OpenCV
- Object detection (YOLO)
- Image segmentation
- Face & pose recognition

MODULE 07

30 Hrs

Reinforcement Learning

- MDPs & rewards
- Q-learning
- Deep Q-Networks
- Policy gradients

MODULE 08

30 Hrs

MLOps & Deployment

- FastAPI & Docker
- MLflow & experiment tracking
- CI/CD for ML
- Cloud deployment

MODULE 09

20 Hrs

Responsible AI

- Bias & fairness
- Explainability (SHAP, LIME)
- Privacy & AI regulation

MODULE 10

60 Hrs

AI Capstone Project

- Problem framing
- Data to deployment
- Presentation & review

Professional Diploma in Artificial Intelligence · Part A**Tools, Projects & Assessment****Tools & Technologies You'll Use**

Python

Jupyter / Colab

NumPy & Pandas

scikit-learn

TensorFlow / Keras

PyTorch

Hugging Face

OpenCV

LangChain

Streamlit / FastAPI

Docker

Git & GitHub

MLflow

OpenAI Gym / Gymnasium

■ Projects You'll Build

1 Customer churn prediction

2 Object detection system

3 LLM-powered assistant with RAG

4 RL game agent

5 End-to-end deployed capstone

■ How You'll Be Assessed

1

Module Assessments

Practical and theory checks at the end of each module.

2

Project Reviews

Trainer review of your mini projects and final project.

3

Certification

Issued on meeting assessment and attendance criteria.

Certification: TÜV SÜD certification + IPCS Global course certificate + Internship Certification.

Where Professional Diploma in Artificial Intelligence Can Take You

Job roles, a realistic growth ladder with salary ranges, and the skills to keep growing.

Roles You'll Be Ready For

1

AI / ML Engineer

Builds and deploys machine learning models.

2

Data Scientist

Solves business problems with data and ML.

3

NLP / LLM Engineer

Builds language and GenAI applications.

4

Computer Vision Engineer

Builds image and video intelligence.

5

MLOps Engineer

Deploys and monitors models in production.

6

AI Product Developer

Builds AI features into applications.

Your Growth Ladder

STAGE

01

0-2 YRS

Junior ML / AI Engineer

Build, train and evaluate models.

₹4 – 7 LPA

STAGE

02

2-5 YRS

ML / AI Engineer

Own models and AI features in production.

₹7 – 14 LPA

STAGE

03

5-8 YRS

Senior ML Engineer / Lead

Architect AI systems and mentor teams.

₹14 – 28 LPA

STAGE

04

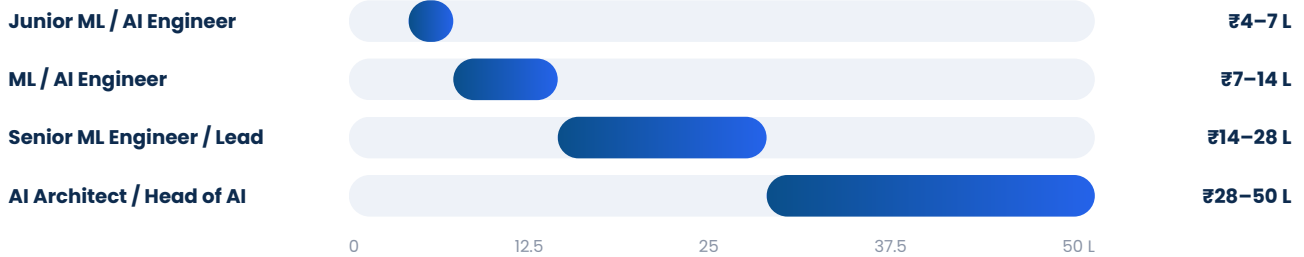
8+ YRS

AI Architect / Head of AI

Set AI strategy and lead organisations.

₹28 – 50 LPA

■ Annual Salary Range (CTC) — ₹ Lakh per annum



Indicative ranges for India in 2026. Lower end: Tier-2 cities such as Coimbatore and smaller firms; upper end: metros and larger companies. Guidance only, not a salary guarantee.

■ Skills to Add Next

- ✓ LLM engineering: RAG, agents, fine-tuning
- ✓ Cloud ML (AWS SageMaker, Azure ML, Vertex AI)
- ✓ Big data (Spark)
- ✓ Advanced MLOps
- ✓ Research paper reading & implementation

■ Certifications to Target

- ✓ TÜV SÜD certification
- ✓ AWS Certified Machine Learning – Specialty / ML Engineer
- ✓ Microsoft Azure AI Engineer
- ✓ Google Professional ML Engineer

■ Upgrade Path at IPCS Global

- 1 Cloud ML certifications
- 2 Specialisation in GenAI / LLM engineering

■ Your First 12 Months After the Course

1
Month 0–1 · Get Visible
Polish your resume and portfolio; apply through the IPCS placement cell's drives.

2
Month 1–3 · First Role
Join as a Junior ML / AI Engineer.

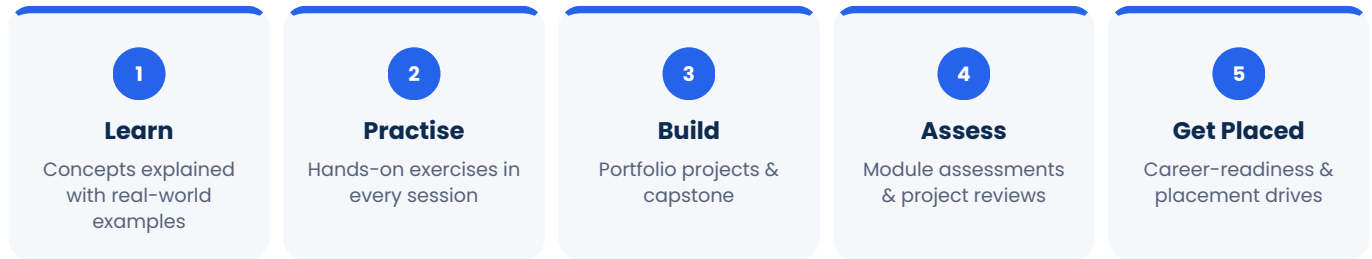
3
Month 3–6 · Get Certified
Earn one certification from the list above.

4
Month 6–12 · Specialise
Pick a specialisation and own a project, system or channel.

How We Train & Certify

Technical skill gets you noticed — presentation, confidence and communication get you hired. Career-readiness runs alongside the syllabus, not after it.

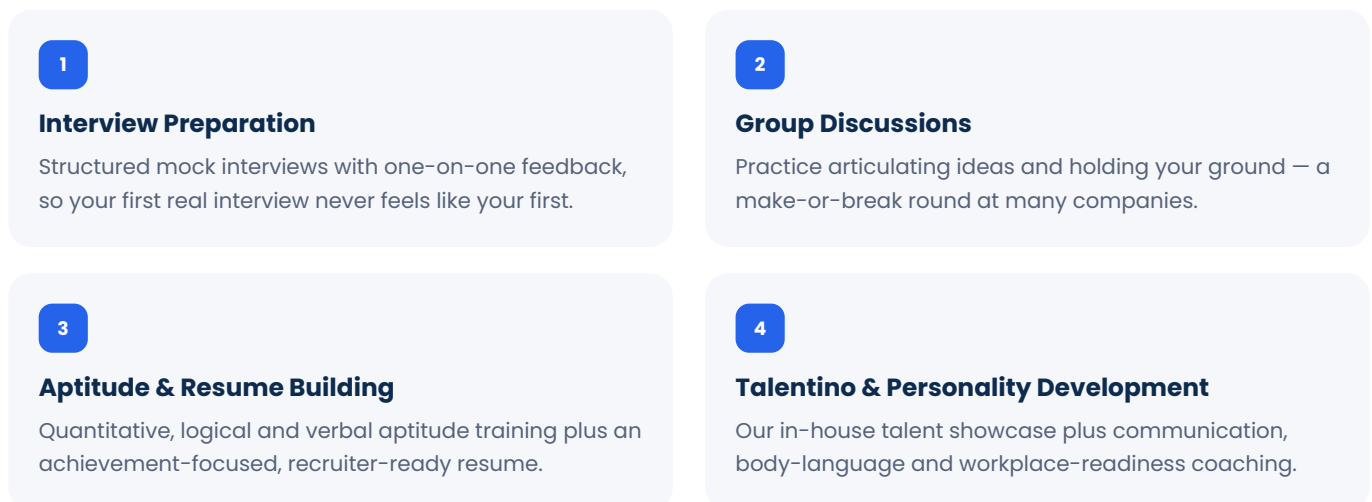
Our Learning Method



Your Certifications

- TÜV SÜD Certification**
 IPCS Global is a cooperation partner of TÜV SÜD, the German testing and certification body. Eligible learners receive a TÜV SÜD certificate that adds independent, international credibility to their skills.
- IPCS Global Course Certificate**
 IPCS Global is an ISO 9001:2015 certified institute and an NSDC approved training partner. Your certificate is issued on successful completion of assessments and projects.
- Internship Certification**
 Documents your real-world projects and GitHub portfolio work — verifiable experience for your resume.

Career-Readiness Track



How IPCS Global Gets You Hired

Every learner goes through a structured career-readiness track alongside the course, supported by our dedicated placement cell.

1

Dedicated Placement Cell

Interview drives, industry referrals and follow-up until you are placed – not just until the course ends.

2

Resume & Portfolio

One-on-one sessions to build a recruiter-ready resume and a project portfolio that proves your skills.

3

Aptitude & GD Training

Quantitative, logical and verbal aptitude plus group discussion practice.

4

Mock Interviews

Simulated technical and HR panels so the first real interview never feels like the first.

Recent IPCS Coimbatore Placements



A selection of recent placements across IPCS Global Coimbatore programmes.

Global opportunity: IT skills are the most globally portable: remote roles, freelance projects and overseas opportunities (GCC, Europe, US, Singapore) are all realistic with experience and a strong portfolio.

Why IPCS Global



18+ Years of Training Excellence

A track record since 2008, refined across 15,000+ professionals trained.



ISO 9001:2015 Certified

Audited, consistent training quality — every batch, every time.



Recognised Partnerships

TÜV SÜD cooperation partner and NSDC approved training partner.



Dedicated Placement Cell

Industry tie-ups, interview drives and follow-up until you are placed.



Real Labs, Real Projects

Industry-grade equipment and live projects — proof of work, not just a certificate.



50+ Branches, One Standard

Across India and the GCC, with weekday, weekend and fast-track batches.

Meet Our Coimbatore Team



Trainers, mentors, counsellors and placement coordinators at IPCS Global Coimbatore — working with every learner from the first class to final placement.

Frequently Asked Questions

Quick answers to the questions learners and parents ask us most. For anything else, call or visit the Coimbatore branch.

Q. Do I need prior experience to join?

Most programmes start from the fundamentals. Each programme lists its eligibility — our counsellors will confirm the right starting point for your background.

Q. Are classes held online or in the classroom?

Classroom / Online / Hybrid. Talk to our counsellors about the best option for your programme.

Q. What batch timings are available?

We run weekday, weekend and fast-track batches, so students and working professionals can both find a schedule that fits.

Q. Is placement guaranteed?

We provide 100% placement assistance — resume building, aptitude and GD training, mock interviews and interview drives through our dedicated placement cell. Final selection depends on each learner's performance, attendance and interview results.

Q. What certificate will I receive?

TÜV SÜD certification + IPCS Global course certificate + Internship Certification.

Q. Can I attend a class before enrolling?

Yes. Book a free demo session to meet the trainers, see the labs and experience a live class before you decide.

Q. What are the course fees?

Fees depend on the programme and batch type. Please contact the Coimbatore branch for the current fee structure and any available offers.

Q. Can working professionals join?

Yes. Weekend and fast-track batches are designed for people who are working or studying alongside the course.

LET'S START THE CONVERSATION

Your Career in IT, AI & Software Development Starts Here

Book a free demo class, meet the trainers and see the labs — our counsellors will help you pick the right programme and batch.

Visit Us

Address #12, 2nd Floor, Swathi Towers,
Sowripalayam –
Masakalipalayam Road, Opp.
GRG Matriculation School,
Periyar Nagar, Peelamedu,
Coimbatore, Tamil Nadu –
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Get In Touch

Phone +91 80860 96664
Email bmcbe@ipcsglobal.com
Web www.ipcsglobal.com
Batches Weekday · Weekend · Fast-track

Book Your Free Demo Session Today

Walk in, call or write to us — meet the trainers, see the labs, and get counselling on the right course and batch before you enrol.

How to Enrol

1

Contact Us

Call, WhatsApp or walk in to our Peelamedu centre.

2

Free Demo

Attend a live class and see the labs.

3

Choose a Batch

Weekday, weekend or fast-track.

4

Enrol & Start

Simple, guided enrolment.