



# Naan Mudhalvan

College Handbook







### Overview

Naan Mudhalvan platform aims to provide dynamic information for college students on courses and relevant information about industry specific skill offerings. This will enable the students of TamilNadu to get training in their chosen field of interest that will help them in achieving their career goals.



The objective of this scheme is to identify potential training providers, to impart various skill trainings based on current industry needs.

Through this flagship program the students will be able to get trained and ensure they get jobs according to their skill sets. We will also offer career and academic guidance to students in state educational institutions.

Naan Mudhalvan showcases 2000+ institutes and consequent 300+ career pathways.



#### Mission

- Our mission is to constantly strive and integrate the efforts of various departments engaged in skilling the youth of Tamil Nadu.
- To bring necessary scale, synergy, oversight, and effective coordination in the implementation of various Skill development schemes and to promote public-private partnership to encourage private sector initiatives like corporate social responsibility (CSR) in the field of skill development and finally support placements.



#### Visio

- To streamline the skill development efforts in the state and create an environment in which we can not only provide skills training but also employment to the youth to meet the growing market demand for skilled manpower and equip them for continuous development and learning in a changing enterprise environment in India and the world.
- Our vision is to create constant opportunities for the youth of Tamil Nadu to be able to acquire skills of choice and to support them with the means of creating sustainable livelihoods.









## **Psychometric Test**

Psychometric testing is a type of test used in recruitment to measure a candidate's mental capabilities, intelligence levels, and aptitude. An employer can use different tests to determine a candidate's job suitability including verbal reasoning, logical reasoning, situational judgement, and numerical reasoning. Each test gives a unique perspective of how a person demonstrates a specific skill or ability.



Psychometric tests provide a rounded view of a candidate, revealing their logical processes, aptitude for problem-solving, and ability to interpret and analyse a range of data. They also provide an insight into their personality traits, integrity, and how they might fit into an existing team.



Psychometric testing allows recruiters to assess these additional traits and skills objectively, so each candidate has an equal chance of success. Formalizing this assessment of aptitude and personality also removes the risk of unconscious bias from interviewers and levels the playing field for candidates. Please login to take your psychometric test.

## **Mandatory Courses**

#### **Bigdata Analytics**

Online

#### Veranda Certificate

This course provides an overview of approaches facilitating data analytics on huge datasets. Different strategies are presented including sampling to make classical analytics tools amenable for big datasets. Tools: Apache hive, apache flume, Kafka, MySQL.

#### **Cloud Essentials**

Online

#### Veranda Certificate

Developing and implementing policies for the use of cloud services, managing requests for new technology, establishing a secure cloud environment, and ensuring appropriate availability of services.

#### **Full Stack**

Online

#### Infosys Springboard Certificate

Develop JavaScript applications using typescript and work with document database using MongoDBA. Utilize Angular JS to design dynamic and responsive web pages.

### **Block Chain**

Online

#### **NSE Academy Certificate**

Appreciate the concepts of Blockchain, Smart Contracts, Hyperledger, IPFS and their Scope Acquire application-oriented skills of the emerging technology of Blockchain.

4

5





## **Mandatory Courses**

## Augmented & Virtual Reality (AR VR) Development

Online

SSC - MESC Certificate

Demonstrate concepts of AR VR, digital twins and metaverse Understand the various applications & use models of AR VR in engineering fields. Demonstrate the ability to do development of AR VR application.

#### **Cyber Security**

Online

#### Infosys Springboard Certificate

Developing and implementing policies for the use of cloud services, managing reauests for new technology, establishing a secure cloud environment, and ensuring appropriate availability of services.

#### **Machine Learning**

Online

Infosys Springboard Certificate

The course will help you understand Statistics and Analytics techniques, Machine Learning models.

### **Industry 4.0**

Online

Skill-Lync Certificate

Detailed Understanding of Smart Manufacturing and Digital Transformation Start Transformation with the Road Map to Demonstrate knowledge on the applications for solution providers in the market. Students can be employed as digital transformation engineer, Digital innovation engineer and the Project manager.





## **Mandatory Courses**

#### **Robotics Simulation for Manufacturing**

Hybrid

SkillSonics with Robo DK, Canada

Applicability in the Automotive and Fabrication industries Welding with Robot programming.

### **Smart Energy Grid**

Online

The State University of New York University of Colorado System, University of California San Diego & Duke University

Learn about smart grid technology and its potential application in different types of power sector areas such as power generation, transmission and distribution. Understand Our Future Energy & Electric Industry Operations & Markets. While learning, planning and operation of smart grid, one can also know the safety issues in transmission, distribution and alternate renewable energy resources integration in present grids.

## Machine learning / Deep learning

Online

Infosys Springboard Certificate

You can perform data analysis, clustering, and visualization learn using python to model and train machines.

#### **Powering IOT using Raspberry Pi or Arduino**

Hybrid

SkillsDA + NASSCOM Future Skills Prime

The participants of this intensive training program will be able to make use of the concepts learnt in academia with practical sessions will acquire competent skills in Internet of Things and IoT Analytics.

7







## **Mandatory Courses**

## **Transportation Infrastructure -**Airports, Metros & Seaport

Online

L&T EduTech certificate

Learners are expected to gain knowledge on the design concepts of different structures and their constructability aspect relating to transportation infrastructure.

## **High Rise Buildings**

Online

L&T EduTech certificate

Learners are expected to be able to do a full-fledged design of any low rise reinforced concrete building.

#### **Design and construction of Steel Buildings**

L&T EduTech certificate

Ascertain the various aspects that govern the design of structural steel buildings Assess the actual loads. Select and plan the structural system. Analyse and design a medium rise multi-storey framed structural steel building as well as a low-rise Industrial building considering the various practical aspects.

### **Building Information Modelling in Architecture, Engineering and Construction**

Hybrid

L&T EduTech certificate

Understand & apply the fundamentals, design concepts, visualization and applications of BIM.

## **Mechanical Courses**



## Introduction to CAD, CAM, and Practical **CNC Machining for Milling**

Hybrid

**AUTODESK Certification** 

Get foundational knowledge in computer-aided design (CAD), computer-aided manufacturing (CAM) and the practical use of CNC mills, set up a CAM program and define toolpaths to cut simple geometry.

## Creating Toolpaths for a CNC Lathe

30 Hrs | Free

Hybrid

**AUTODESK Certification** 

Understand design intent from detailed drawings. Create a process plan for machining parts. Create 3D CAD files from 2D drawings.

#### Introduction to 3D Modeling for Manufacturing

60 Hrs | Free Hybrid

**AUTODESK Certification** 

Understand the parametric CAD workflow. Identify interface aspects of Fusion 360. Create designs with mechanical motion. Manipulate appearances and physical materials. Create detailed drawings.

#### AutoCAD - via Tamil medium

45 Hrs | Subsidized

Online

**GUVI's Certificate** 

This course will teach you the basic commands and tools necessary for professional 2D drawing, designing and drafting using AutoCAD.









## **Cloud Computing** Courses



#### **Oracle cloud Infrastructure Architect Associate**

#### 06 Months | Free

**Oracle Certificate** 

Learn about Oracle Cloud Architecture and User Management, Basics of VCN and network security, Concepts of Load Balancer and Traffic Management, OCI Compute and Storage options, Concepts of Autoscaling and OS Management, Databases on Oracle Cloud and their applications.

#### **Azure Fundamentals (Az-)**

#### 60 Hrs | Subsidised

Microsoft Certification

This course will provide foundational level knowledge on cloud concepts; core Azure services; and Azure management and governance features and tools.

### **Cloud Computing**

215 Hrs | Free



TCS iON Certificate

This course will help student gain knowledge on cloud computing and teaches them to store, manage, process, share and collaborate on data and information with high speed and accuracy.

#### Azure Data fundamental (DP-)

120 Hrs | Subsidized

Hybrid

Microsoft Certification

Upon completion of this course, you will be able to Build a simple HTML text site, Style web pages using CSS, Program websites with JavaScript, Build a setup using Bootstrap, Implement a functional front-end web application using React.

### **Data Science for Engineers**

**Data Analytics Courses** 

Online

**SWAYAM Certification** 

Introduce R as a programming language, Mathematical foundations required for data science, First level data science algorithms, Data analytics problem solving framework Practical capstone case study.

#### **Data Science Foundation**

Online

Certification

Students will be able to demonstrate proficiency with statistical analysis of data and will develop the ability to build and assess data-based models. Students will also demonstrate skill in data management.

#### **Introduction to Machine Learning**

90 Hrs | Free Online

Online / Offline / Hybrid

Subsidized

**SWAYAM Certification** 

With the increased availability of data from varied sources there has been increasing attention paid to the various data driven disciplines such as analytics and machine learning. In this course we intend to introduce some of the basic concepts of machine learning from a mathematically well motivated perspective.

#### **Big Data**

Certification

Big data is a collection of massive and complex data sets and data volume that include the huge quantities of data, data management capabilities, social media analytics and real-time









## **Logistics & Construction** Courses



## **Principles of Construction Management**

90 Hrs | Free

**SWAYAM Certification** 

The course seeks to present a rounded view of the divers issues involved in the management of construction projects, and includes aspects like construction economics, quality and safety management, and contract management, apart from time management and scheduling, estimation.

#### **Product Design and Development**

90 Hrs | Free

Hybrid

**SWAYAM Certification** 

It has been established worldwide that the most successful economies are based on innovation and creativity led entrepreneurship. The government is focusing on putting concerted efforts to produce job creators.

#### **Certificate in Quality Management**

45 Hrs | Subsidized

Certification

Exposure to industry quality system practices and understanding its application.

#### **Certificate in Transportation Controller** Certification

45 Hrs | Subsidized Offline

Concepts and procedures, the cognitive and skills pertaining to various operating tasks, importance of controlling transportation.

## **Electrical & Electronics** Courses

#### Electric Vehicles - I

90 Hrs | Free

Online

**SWAYAM Certificate** 

This course will be a first level course on electric vehicle. Students will be able to understand the operation of battery driven electric vehicle. The course will start with introduction section which will enable the students to understand the focus areas that come under the umbrella of electric vehicles.

## **Revit for Electrical design**

60 Hrs | Subsidized

Online / Hybrid

**Autodesk Participation Certificate** 

Create electrical circuits and monitor wire sizing by creating custom schedules. Create Industry standard, Custom content for improved electrical layout and annotations.

## **Embedded Software Programming**

240 Hrs | Subsidized

Offline

**VVDN Technologies Certificate** 

To understand real-time C and Linux programming concepts.

## **Electronics for Beginners**

240 Hrs | Subsidized

**VVDN Technologies Certificate** 

To Understand the Basics of Electronics and Hardware design.









## **Fullstack Development** Courses



## Data Structures and Algorithms Laboratory 90 Hrs | Subsidized Hybrid

iamneo Certification

At the end of the course, you will be able to Implement all operations on different linear data structures, Develop all operations on different non-linear data structures, Apply various searching and sorting techniques, Use appropriate data structure for any given problem.

#### **Fullstack Development**

60 Hrs | Subsidized Hybrid

#### **FACE Prep Certification**

Aimed to comprehensively train students on Front End Development, Back End Development and DB. Also to train students on all the relevant languages such as HTML, CSS, Node.js, JavaScript etc.. to become a Full Stack Developer.

#### Front-End Information Technology with React

120 Hrs | Subsidized Hybrid

#### iamneo Certification

Upon completion of this course, you will be able to Build a simple HTML text site, Style web pages using CSS, Program websites with JavaScript, Build a setup using Bootstrap, Implement a functional front-end web application using React.

#### Java Full Stack with Angular

120 Hrs | Subsidized Hybrid

iamneo Certification

The learners will be able to build a fully functional web application, Understand and develop basic HTML, CSS and JS frontend applications, Understand backend using JAVA + Mysgl.

## **DevOps Courses**

### **DevOps Foundation**

30 Hrs | Free

Online

Veranda Learning Certificate

This DevOps course is combination of concepts of Linux and Git. The Linux course will teach ownership and permissions of the files and directories – true multitasking, Emerging Technologies, Virtual memory – shared libraries and many more.

## **DevOps Engineer Expert (AZ-)**

120 Hrs | Subsidized Hybrid

Microsoft Certification

This course provides the knowledge and skills to design and implement DevOps processes and practices. Students will learn how to plan for DevOps, use source control, scale Git for an enterprise, consolidate artifacts, design a dependency management strategy, manage secrets, implement continuous integration, implement a container build strategy, design a release strategy, set up a release management workflow, implement a deployment pattern, and optimize feedback mechanisms.

## **Programming, Data Structures and Algorithms using Python**

Online

**SWAYAM Certification** 

This course is an introduction to programming and problem solving in Python. It does not assume any prior knowledge of programming. Using some motivating examples, the course quickly builds up basic concepts such as conditionals, loops, functions, lists, strings and tuples. It goes on to cover searching and sorting algorithms, dynamic programming and backtracking, as well as topics such as exception handling and using files.









## **Industry 4.0**



## Introduction to Industry 4.0 and Industrial Internet of Things

90 Hrs | Free

Online

#### **SWAYAM Certification**

Industry 4.0 concerns the transformation of industrial processes Emerging Technologies through the integration of modern technologies such as sensors, communication, and computational processing.

#### **Robotics**

90 Hrs | Free

Online

#### **SWAYAM Certification**

The course will start with a brief introduction to robots and robotics. The motivation behind keeping robots in modern industries will be discussed.

## Will help to Learn Blockchain for Business – Fundamentals: via - Tamil medium

45 Hrs | Free

Onlin

#### **GUVI Certificate**

Blockchain, the most disruptive technology after the internet that enabled peers to transfer digital assets without intermediates.

### AI: Search Methods for Problem Solving

90 Hrs | Free Onl

Online

#### **SWAYAM Certification**

For an autonomous agent to behave in an intelligent manner it must be able to solve problems.

## Emerging Technology Courses

Refer sprustes hecountries

## **Data Structures and Algorithms Laboratory**

50 Days

Online

Professional Certification from NSE Academy

Appreciate the concepts of Blockchain, Smart Contracts, Hyperledger, IPFS and their Scope Acquire application-oriented skills of the emerging technology of Blockchain.

## **Blockchain Technology**

30 Days

Online

Professional Certification from NSE Academy

Appreciate the concepts of Blockchain, Smart Contracts, Hyperledger, IPFS and their Scope Acquire application-oriented skills of the emerging technology of Blockchain.

## Machine Learning with Applications to Object Recognition

30 Days

Online

Appreciate the concepts of Blockchain, Smart Contracts, Hyperledger, IPFS and their Scope Acquire application-oriented skills of the emerging technology of Blockchain.

**Certificate Course on Data Engineering** 

Online | Offline | Hybrid

Certificate (360DigiTMG)

Explore the various tools data engineers use and find out the difference in the job responsibilities of a Data Scientist and a Data Engineer.









# Civil & Architecture Courses



#### **Revit for Architectural Design**

60 Hrs | Subsidized

Online / Hybrid

**Autodesk Participation Certificate** 

To create 3D Building, Elevation and Section with BOM.

#### **Construction Technology**

120 Hrs | Subsidized

Hybric

**ISERT/OEM Certification** 

This course will help in getting Employment Opportunity for Civil Engineering Students.

### **Revit for Architectural Design**

60 Hrs | Subsidized

Online / Hybrid

Structural Design

**Autodesk Participation Certificate** 

This will help to create structural families, including retaining walls, concrete piles, pile caps, and precast beams.

## Revit for Architectural Design - Infrastructure Design

60 Hrs | Subsidized

Online / Hybrid

**Autodesk Participation Certificate** 

Understand surface objects and create surfaces from a variety of data. Apply surface build options and surface styles.

## **Banking & Finance Courses**



## **Certificate Course in Financial Analysis**

90 Hrs | Free

Online

**TNASDC Certification** 

The Business English course provides methods for developing English language and communication skills for today's workplace. Divided into four modules: Reading, Writing, Vocabulary and Grammar.

#### **Securities Markets**

30 Hrs | Subsidized

Online

Professional Certification from NSE Academy

Distinguish the various securities market instruments and investment opportunities Acquire futuristic skills for enhanced employment in brokerage firms, depository participants and other financial services companies.

#### **Basics of Finance and Fintech**

15 Hrs | Subsidized

Online

Face Prep Certification

To train students on the basics of Finance to enhance their real-world financial knowledge. To create awareness about opportunities in Fintech industries. To inculcate the knowledge of industry practices along with the use of associated tools and technologies.

## **Certificate Course in Mutual Fund Foundation**

24 Hrs | Subsidized

Onlin

**TNASDC Certification** 

To know the basics of mutual funds, their role and structure, different kinds of mutual fund schemes and their features.









## **Soft Skill Courses**

## **Technical English for Engineers**

90 Hrs | Free Online

#### **SWAYAM Certificate**

The course covers all the areas of grammar necessary for the undergraduate students of engineering sciences. This includes topics such as reading/writing/listening comprehension, note taking, summarizing, report writing, along with elements of grammar and vocabulary.

#### **Business English Communications**

90 Hrs | Free

#### **SWAYAM Certificate**

The Business English course provides methods for developing English language and communication skills for today's workplace. Divided into four modules: Reading, Writing, Vocabulary and Grammar.

#### Soft skills and Employability Skills

20 Hrs | Subsidized

#### Cambridge Authorized Partner - Launchpad Learning Labs Pvt. Ltd

The skills introduced in Soft skills & Employablity skills are industry neutral and prepare students to achieve extra ordinary results in their Job hunt as well as in their professional

## A 360° Interview Preparation Course

60 Hrs | Subsidized

#### Cambridge Authorized Partner - Launchpad Learning Labs Pvt. Ltd

The course will help learners deal with stressful interview situation. Express themselves in Group discussion. Enhances basic communication skills to crack written test. Handle Interview with confidence.

## **Aptitude**

### **Aptitude for Placements**

45 Hrs | Free

Online

#### **FACE Prep Certification**

The skills introduced in Soft skills & Employablity skills are industry neutral and prepare students to achieve extra ordinary results in their Job hunt as well as their professional careers.

## **Aptitude for Placements**

120 Hrs | Free

Online

#### iamneo Certification

The course will help learners deal with stressful interview situation. Express themselves in Group discussion. Enhances basic communication skills to crack written test. Handle Interview with confidence.

#### **Placement Readiness Program**

120 Hrs | Subsidised

Online | Offline | Hybrid

#### Certification

A flagship program in Emerging Technologies which can guarantee 50% to 60% placement for students.

#### **Interview Readiness**

60 Hrs | Subsidized

#### **FACE Prep Certification**

To train students on all skills required to be Interview-ready. To develop Communication Skills to Emerging Technologies by actively engaging in training sessions. To provide students with Mock experience on all aspects of a real interview.





## **Higher Education**



### GATE coaching (EC | EE | ME | CE | CS)

350 Hrs | Subsidized

Veranda Course Completion Certificate

Enables students to pursue higher education in the premier institutes such as IIT's/NIT's/IISc etc. Also helps secure jobs in PSUs.

#### **GRE**

70 Hrs | Free



Veranda Course Completion Certificate

The course can help apply for Masters programs in the universities abroad.

#### **IAS Foundation**

29 Hrs | Free



Veranda Course Completion Certificate

UPSC Civil Services Exam for 24 services including IAS, IPS, IRS, IFS, IOFS etc... State Public Service Commission (GROUP - I,II,III & IV) for Deputy Collector, Deputy Superitendent of Police, Asst Commissioner - Commercial Tax, Executive officer, Planning officer, etc...

#### **CA Foundation**

27 Hrs | Free



Veranda Course Completion Certificate

Auditing and Assurance Services.





## **Finishing Schools**

Naan Mudhalvan platform aims to create constant opportunities for the youth of Tamil Nadu to be able to acquire skills of choice and to support them with the means of creating sustainable livelihoods.

Finishing school aims at empowering students with various skills sets in addition to Knowledge that makes them Industry ready.



Finishing schools additionally conduct workshops to get the candidates skilled in the use of some software skills considered to be a crucial part of their daily expert life.

## **Finishing School Partners**

masai

WILEY EDGE



navgurukul

SONY











## Mentorship

Mentorship is one of the key parts of the development of any student. Most often than not, students are unsure about what career path they want to pursue and how they should pursue it. While hard skills are very important for developing skills and knowledge in a field, getting guidance and tips from real industry experts will give students clarity and assistance in finding a career path.



Through the mentorship program, students can meet, interact and learn from mentors who are leaders in their field.

Naan Mudhalvan mentorship evaluates where a student stands and their goals

They are then bridged to a mentor, who is an expert professional in a selected industry

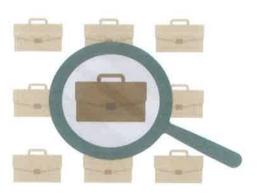
A mentor – mentee relationship is facilitated

Students receive valuable skills and guidance about how to plan, prepare and succeed in their field.

## Jobs

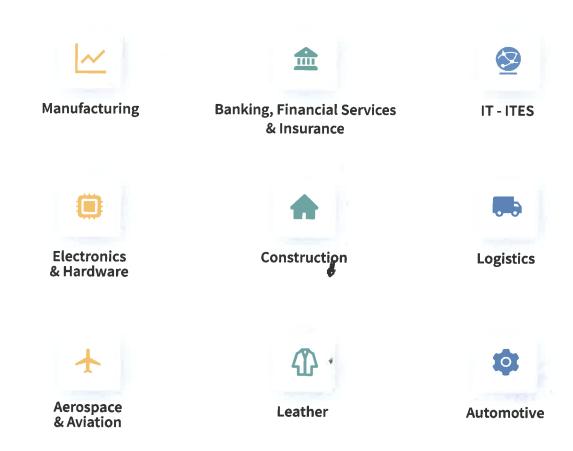
Naan Mudhalvan provides free employment linked skill development trainings to the youth in the age group of 18-35 years across the state under the various state and centrally sponsored schemes.

These nationally certified trainings are provided through empaneled training partners at centres in urban and rural areas across the state in



over 20 different sectors like Healthcare, Media & Entertainment, Green jobs, Retail, Beauty, Construction, Electronics and Hardware, Food Processing, Health Care, IT ITES, Leather, Logistics etc..

#### **Job Sectors**







## **Our Partners**





























masai









































## Naan Mudhalvan

- Tamil Nadu Skill Development Corporation, 1st Floor, Employment Office, Alandur Rd, Thiru Vi Ka Industrial Estate, Guindy, Chennai, Tamil Nadu - 600032
- support@naanmudhalvan.in
- 044-2250 0135



www.naanmudhalvan.tn.gov.in

# Naan Mudhalvan

College Handbook

