Government College of Engineering, Salem-11

(An Autonomous Institution Affiliated to Anna University, Chennai *NAAC Accredited)

Strategic Plan Deployment 2019-2024

Vision of the Institute

We envision our students as excellent Engineers not only in the field of Science and Technology, but also in good citizenship and discipline. Our commitment lies in producing comprehensive knowledge seekers and humane individuals, capable of building a strong and developed nation.

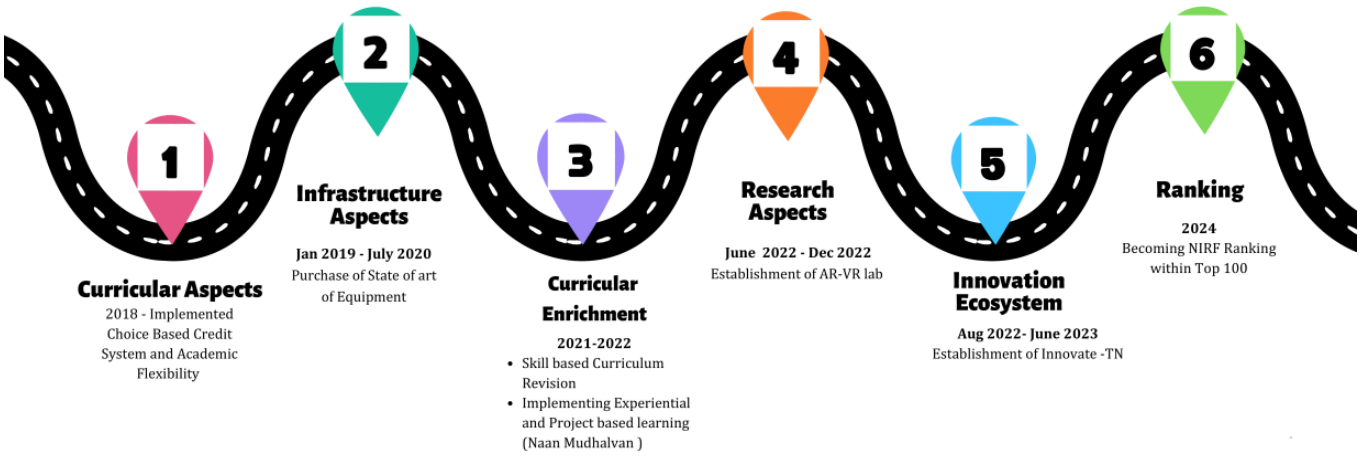
Mission of the Institute

- To impart update technical education and knowledge.
- To groom our young students to become professionally and morally sound engineers.
- To teach global standards in production and value based living through honest and scientific approach.

INTENT-2025

- Among Top Five State Technical Institutions
- Multi Dimensional Skill Delivery beyond Class Room Learning
- Major Destination for Industries to Pick Engineers
- Entrepreneurial Culture and Startups
- Infusing Unlimited Soft Skills
- Excellent Synergy with Industries
- National Level Achievements in Sports with Modern Indoor Stadium
- Outstanding Alumini Relationship

Strategic Plan 2019-2024



Curricula Aspects:

Choice Based Credit System (CBCS) was introduced in the academic year 2016-17 as 2016 regulations and was reframed in 2018 Regulations for both UG and PG. CBCS is a student centric education model that offers a greater choice of learning and flexibility in choosing the core, Program elective, open elective, Honour/ Minor or skill based courses. The courses will be evaluated in grading system that is better compared to conventional system. The regulations and curriculum has the following provisions Internship, Project/Mini Project, Field visit, Language Laboratory, In plant Training, Self-study courses, Break of study permitted, Open Electives, Value added courses, SWAYAM/MOOC courses, Audit and mandatory courses as per the AICTE model curriculum. The outcome is perceived from the Result and placement statistics. The overall pass percentage for UG of all departments during April/May 2022 is 88.76% and PG is 98.36%. The overall placement percentage for the academic year 2022-2023 is 92%.

Infrastructure Aspects:

The Technical Education Quality Improvement Programme aims to upscale and support ongoing efforts of GOI to improve quality of technical education and enhance existing capacities of the institutions to become dynamic, demand-driven, quality conscious, efficient and forward looking, responsive to rapid economic and technological developments occurring both at national and international levels.

The following equipment were purchased under TEQIP III phase for the purpose of enhancing the research and development & innovation

S.No	Name of the Equipment	Department	Date of payment	Amount
1	Firewall & Threat prevention Packages and end switches	ECE	12.04.18	2478236
2	EBSCO	Library	29.3.2018	991250
3	EDS attachment for SEM	Mechanical	06.09.18	3020018
4	Core Switches and Distribution Switches	ECE	25.06.18	4929837
5	VOIP based PABX	ECE	29.05.2019	1445570
6	Optical Emission Spectrometer	Metallurgy	21.6.2019	1398300
7	CNC Wire cut EDM machine	Mechanical	12.6.2019	3891640
8	d SPACE Micro Lab Box	EEE	07.09.2019	1858500
9	Swayam Prabha Channel	CSE	25.05.18	79000
10	Curriculum Design Software IonCUDOS	Mechanical	23.08.18	354000
11	X-ray Diffractometer	Metallurgy	30.05.2019	5701313
12	Display System (Board, Projector and Accessories)	ECE	31.7.2019	124372
13	INTEL i5 Processor	CSE	30.7.2019	997619.2
14	INTEL i7 Processor	CSE	30.7.2019	950599.95
15	Servo hydraulic Shake Table	Civil	16.3.2020	5310000
16	Solar PV and Thermal Imager-EEE	EEE	30.7.2019	649118
17	Solar Array Simulator	EEE	07.09.2019	794799.62
18	Tally Software	TEQIP office	21.11.2019	21948
19	Projector	Chemistry	05.02.2021	59787
20	Server Infrastructure	ECE	16.02.2021	235239
21	Hard disk	EEE	31.12.2020	12149
22	Tripod stand	Mechanical	31.12.2020	1799

23	75" Television	Mechanical	12.02.2021	150000
24	55" Television	Mechanical	12.02.2021	79800
25	All in one PC	CSE	24.02.2021	1049850
26	Tripod	EEE	10.02.2021	1799
27	Memory card	EEE	5.02.2021	3100.3
28	Video camera	Civil	24.02.2021	498620
29	large display	ECE	16.02.2021	149000
30	Interactive panel	ECE	20.02.2021	600000
31	Workstation	Chemistry	26.02.2021	522554
32	Laptop	CSE	10.03.2021	452830
33	Printer	EEE	23.02.2021	189800
34	Bosch	ECE	20.02.2021	12499
35	Cable fault	ECE	20.02.2021	18000
36	Tablet	CSE	26.02.2021	159500
37	USB, Camera	ECE	08.03.2021	20998
38	Speaker with mic	EEE	24.02.2021	98320
39	Interactive panel	ECE	23.02.2021	384000
40	Extension box	ECE	08.03.2021	7483.5
			Total	**39703248**

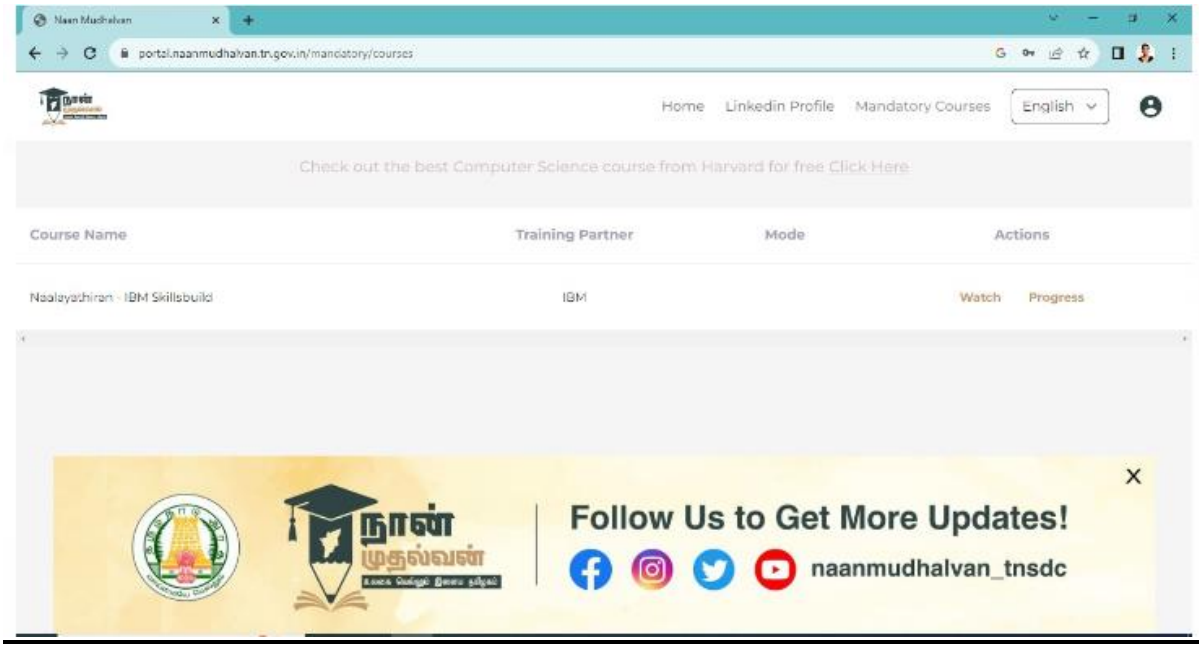
Curriculum Enrichment:

Based on local, regional, national and global technical and Industry demands, Outcome Based Education System which had been introduced in R-2018 UG and PG with respect to Multidisciplinary Approach in view of NEP2020 and Innovative Curricula that includes additional credit based courses in the following revision has been made Engineering in R-2018A and R-2022. B.E Minor degree in other specialisation has been introduced in R-2018A and R-2022 in view of Multidisciplinary Approach as of NEP 2020 Policy. B.E Honors in the same specialization has been introduced in that student have to earn additionally a minimum of 18 credits in any one of the verticals of the same programme. For 2018 A regulations the vertical subjects are implemented in all the departments.

2022-2023 (Even semester) Naan Mudhalvan Courses – Faculty In charges details

Sl.No	Name the Courses	Sem	No.of Students	Name of the Faculty incharge
1	Robotic Process Automation	4	139	1. Dr. R. Vivekananthan , Asso.Prof.(CA S)/ Mech.
				2. Prof. R. Shobana, AP/ Civil
				3. Dr. S. Ganesan, A sso.Prof.(CAS)/EEE
2	Block chain	4	66	1. Prof. D. Manibharathi, AP/ECE
				2. Dr. T. Murugesan, AP/

				Civil
3	Digital Marketing	4	59	1. Prof. P. Deepthi, AP/ ECE 2. Dr. P. Senthamilselvi, AP/Civil
4	Foundation for AI, ML, FS	4	9	M. Priadarsini, AP/ECE
5	Network Essentials	4	74	1. Dr. P. Indra, AP/ECE 2. Prof. K. Saraswathi, AP/CSE
6	Network Engineering	6	32	Prof. I. Kalphana, AP/ECE
7	Electric Vehicle Design	6	56	1. Prof.M. Periyasamy, AP/Mech. 2. Prof. M. Deepakkumar, AP/ Mett.
8	Professional Readiness for Innovation, Employment & Entrepreneurship	6	88	1. Dr. M. Dhinakaran, Asso.Prof.(CAS)/ ECE 2. Prof. S. Ruba, AP/ CSE
9	Smart & Advanced ManufacturingDesign & Simulation	6	134	1. Prof. K. Kavitha, AP/Mechanical 2. Dr. S. Dhanalakshmi, AP/Mett.
10	Sustainable Building Design	6	125	1. Prof. M. Raffikbasha, AP/ Civil 2. Dr. R.S. Ravichandran, AP/Civil
11	Product Design and Manufacturing & 3D SurfaceModelling	4	109	1. Dr. M. Mohanraj, AP/Mechanical 2. Prof. R. Vinothbabu, AP/Mett.
12	Design of solar Photovoltaicsystem	6	36	Dr. P. Karpagavalli, Prof.(CAS)/EEE
13	Embedded System Design-Industrial Applications	6	29	Dr. T.R. Sumithra, AP/EEE



2022-2023 (Odd Sem)- Naan Mudhalvan Mandatory Course – Faculty In charges details

Sl.No	Mandatory Courses	Sem	No.of Students	Name of the Faculty incharge
1	Building Information Modeling	5	62	Prof. M. Raffikbasha, AP/ Civil
2	Design and construction of Steelbuildings	7	59	Prof. R. Shobana, AP/ Civil
3	High Rise Building Design	7	60	Dr. T. Murugesan, AP/ Civil
4	Transportation Infrastructure-Airports, Metros & Seaports	5	63	Prof. D. Amali, AP/Civil
5	Machine Learning with Application to Object recognition	5 & 7	16	Prof. D. Manibharathi, AP/ECE
6	Powering IoT using Rashberry Pi or arduyno	5	53	Dr. T.R. Sumithra, AP/EEE
7	Electrical vehicle	5 & 7	85	Prof. K. Kavitha, AP/Mech.
8	Electrical Vehicle Chargingsystem	5 & 7	37	Dr. K. Logavani, AP/EEE
9	Smart Energy Grid	5 & 7	30	Dr. C. Govindaraju, ASP/EEE
10	Robotics simulation forManufacturing	5 & 7	57	Dr. R. Vivekananthan, ASP/Mech.
11	Machine Learning	5 & 7	207	Prof. K. Uma, AP/Mech.
12	Industry 4.0	7	51	Dr. D. Lavanya, AP/Mech
13	Cyber security	5	14	Prof. P. Deepthi, AP/ECE

14	Full stack	5	12	Dr. R. Golda Brunet, AP/CSE
15	AR/VR	5	18	Prof. M. Priadarsini, AP/ECE
16	Cloud Essentials	5	26	Prof. S. Ruba, AP/CSE
17	Big Data Analytics	5	26	Dr. C. Rani, AP/CSE
18	Cambridge (Department of English)	1	435	Dr.N.K. Vivekanandha n,Dr. P. Sakthivel
19	Microsoft Office Fundamentals (Mechanical)	3	110	Dr. R. Premkumar Thiru. M. Periyasamy
	Microsoft Office Fundamentals(Civil)	3	122	Dr. P. Senthamilsel vi Thiru. V.C.A. Asokumar
	Microsoft Office Fundamentals(EEE)	3	59	Dr. S. Ganesan
	Microsoft Office Fundamentals(ECE)	3	55	Tmt. T. Thenmozhi
	Microsoft Office Fundamentals(CSE)	3	53	Prof. K. Saraswathi, AP/CSE
	Microsoft Office Fundamentals(Metallurgy)	3	57	Thiru. M. Deepak Kumar

NalaiyaThiran - Experiential Project Based Learning

Total No. of departments opted	2 – CSE & ECE
Total No. of Eligible Students for NalaiyaThiran Project	128

Consolidated Project Status				
No. of Students Onboarded	**No. of Mentors**	**No. of Evaluators**	**Student Details**	
			No. of Students	**Total No. of Teams Formed**
128	6	6	128	31

Batch Details		
No. of Batches Conducted	**Year & Department**	**Schedule of the batches**

2	Final year CSE	1. **B2-2M4E**– Tuesday (FN:9 .00 a.m to 12.00a.m) & Thursday Evening (6.00 p.m to 9.00 p.m)
	Final year ECE	2.**B3 – 3M5E** – Wednesday (FN:9 .00 a.m to 12.00a.m) & Friday Evening (6.00 p.m to 9.00 p.m)

NalaiyaThiran - Experiential Project Based Learning

Project Phase I (Preparation phase, Registration, Environment set up)

1. Week -1 : 22 – 27 Aug 2022
2. All students received their login credentials. Some faced difficulties in on boarding. SPOC communicated through Support System and the issues are resolved.
3. The student's form teams into 31 teams.
4. The team students identified the project and problem statementformulated.
5. The SPOC approved all the31 teams.
6. The SPOC completed the batch allocation into 2 training batches.
7. The SPOC assigned 6 Mentors and 6 evaluators.
8. All students get access to the enrolled project.

Project Phase II (Ideation Phase : Literature Survey, Empathy map, Defining problem statement, Ideation)

1. Week 2,3,4 (29th August – 17th September 2022)
2. Students complete the installation of prerequisites and started attending the training session.
3. Mentors and Evaluators have been assigned to project teams by SPOC 4.Students have completed the assignments and tasks shared during the training session.
4. All the students are attending the session on a regular basis, which were monitored by Mentors. The teams assigned to the mentor, and they monitor the team to complete all the tasks in time.
5. The Students completed the Literature Survey and also Empathy Map and uploaded to GitHub repository, which are evaluated by the Evaluators.
6. The Students, SPOCs, Mentors and Evaluators are joined in Rocket Chat Application
7. The students submitted Literature review and empathy map of the project on time.

List of Mentors

S.NO	Name of the Faculty	E-mail ID	Mobile No.	No.of Teams	No.of Students
1	Deepthi P	Deepthiparamasivam@Gmail.Com	9629871069	5	20
2	Dr.Dhinakaran M	Dhina_au@Yahoo.Com	9952341155	5	20
3	Dr. R. Golda Brunet	Goldabrunet@Gcesalem.edu.in	8754199802	5	21
4	M Priadarsini	Priadarsinicse@Gmail.Com	9087597979	6	25
5	S.Ruba	Ruba3112@Gmail.Com	8778307800	5	21
6	Saraswathi K	Ksaras2k15@Gmail.Com	9952779799	5	21

List of Evaluators:

S.NO	Name of the Faculty	E-Mail ID	Mobile No.	No.of Tems	No. of students
1	Dr.C.Rani	Rani23508@Gmail.Com	9791638379	5	20
2	K.Jayanthi	Jayanthikathir4413@Gmail.Com	9486281274	6	25
3	Manimala K	Manimalaaks@Gmail.Com	9442529413	5	21
4	P. Indra	Indhu3413@Gmail.Com	9003055428	5	20
5	T.Thenmozhi	Thenkavin2555@Gmail.Com	9677094353	5	21
6	Tharani P	Tharanip46@Gmail.Com	8870215728	5	21

IBM – Nalaiya Thiran – Project Titles

S.No	Team ID	Project Title	No. of members in the team
1	PNT2022TMID06709	Smart Lender - Applicant Credibility Prediction For LoanApproval	5
2	PNT2022TMID06713	Plasma Donor Application	4
3	PNT2022TMID06716	Personal Expense Tracker Application	4
4	PNT2022TMID06724	Retail Store Stock Inventory Analytics	5
5	PNT2022TMID06728	Containment Zone Alerting Application	5
6	PNT2022TMID06735	Early Detection Of Chronic Kidney Disease Using Machine Learning	4

7	PNT2022TMID06737	Inventory Management System For Retailers	4
8	PNT2022TMID06739	University Admit Eligibility Predictor	4
9	PNT2022TMID06742	Global Sales Data Analytics	4
10	PNT2022TMID06745	Smart Fashion Recommender Application	4
11	PNT2022TMID06749	News Tracker Application	4
12	PNT2022TMID06754	Nutrition Assistant Application	4
13	PNT2022TMID06756	Skill / Job Recommender Application	4
14	PNT2022TMID06760	Customer Care Registry	4
15	PNT2022TMID06765	Inventory Management System For Retailers	4
16	PNT2022TMID06771	Emerging Methods For Early Detection Of Forest Fires	4
17	PNT2022TMID06775	News Tracker Application	4
18	PNT2022TMID06777	Retail Store Stock Inventory Analytics	4
19	PNT2022TMID06779	A Novel Method For Handwritten Digit Recognition System	4
20	PNT2022TMID06781	Global Sales Data Analytics	5
21	PNT2022TMID06787	Signs With Smart Connectivity For Better Road Safety	4
22	PNT2022TMID06799	Crude Oil Price Prediction	4
23	PNT2022TMID06801	Plasma Donor Application	4
24	PNT2022TMID06805	Skill / Job Recommender Application	4
25	PNT2022TMID06806	Gas Leakage Monitoring & Alerting System For Industries	4
26	PNT2022TMID06812	IoT Based Safety Gadget For Child Safety Monitoring & Notification	4
27	PNT2022TMID06813	Personal Expense Tracker Application	4
28	PNT2022TMID06816	Nutrition Assistant Application	4
29	PNT2022TMID06820	IoT Based Safety Gadget For Child Safety Monitoring & Notification	4
30	PNT2022TMID06832	Industry-Specific Intelligent Fire Management System	4
31	PNT2022TMID06835	Personal Expense Tracker Application	4

Training Sessions attended by Students, SPOC, Mentors, Evaluators

1. Students attended, Platform & Project Orientation Session on AI, Applied Data Science, Data Analytics, IOT & Cloud App Development ,which was held on 27th July to 3rd August 2022and 9th to 13th August2022.
2. Agile Methodology Session attended by students which was held on 4th & 5th August2022.
3. Ask Me Anything (AMA) Session attended by faculties ,was held on10th August2022
4. Project Evaluation and Metric Assessment Session was attended by Evaluators which was held on 12th August 2022 and 18th August2022

5. Learning Resources & Mentor Support Session attended by mentors which was held on 19th August 2022 and 20th August2022
6. Project Templates & Ideation Process Session attended by all the faculties(SPOC, Mentor, Evaluator), which was held on 22nd August 2022, 23rd August 2022 and 25th August 2022
7. IBM Skills Build Enrollment Process Session for the students whichwas held on 24August 2022
8. Training Calendar and its Agenda Session for the faculties (SPOC, Mentor, Evaluator) which was held on 26 August 2022
9. Training & Project Calendar along with the Roles & Responsibilities for the faculties (SPOC, Mentor, Evaluator) which was held on 29 August 2022
10. Technical Session from 1 September 2022onwards attended by students.
11. Project Evaluation and Metric Assessment Session for Evaluators which was held on19 September2022.

Research Aspects

Augmented Reality / Virtual Reality Lab

The Augmented Reality and Virtual Reality Laboratory was established in the Research and Development block at Government College of Engineering, Salem during May 2022. The lab is Air Conditioned with the facilities of High End Personal Computers with Wi-Fi/Ethernet Service.

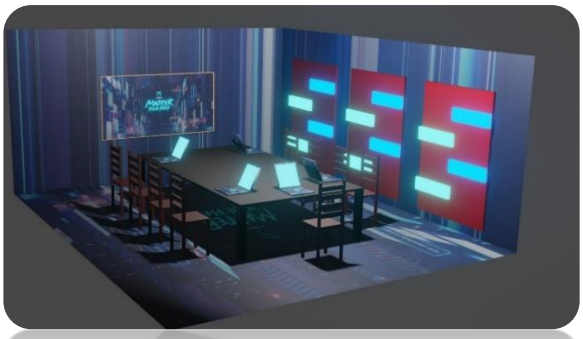
The lab consists of Hardware Components worth Rs.23,60,000 and software materials worth Rs.23,69,052.

One week Faculty Development Program titled ”Hands on training of AR/VR gadgets” was conducted for faculty members of Government College of Engineering, Salem starting from 5-09-22 to 30-9-22 in four batches by Dr.R.GoldaBrunet, AP/CSE and Prof.M.Priadarsini, AP/CSE with the motivation from Dr.R.Malayalamurthi, (Principal), Dr.D.Shoba Rajkumar, (HoD/ Civil, AR/VR lab in charge) and and Dr.A.M.Kalpana (HOD / CSE).

22 Faculty members from all departments were trained in the series on usage of the devices and domain specific problem statement were collected from them. Faculty members motivated the students to use and develop AR/VR projects. Students from ECE were working on virtual tour of their department.

Meanwhile 18 students from CSE, ECE and EEE were trained in AR/VR app development by Ingage under Naan Mudhalvan scheme from 31-10-22 t0 11-11-11. They developed few virtual models as shown below as trained during the course.

Sample Projects



Sample Projects

After the completion of the training, the students from ECE & CSE with the knowledge of their respective department faculty started using the AR/VR Laboratory. The students were allowed to experience the Virtual Reality by using Oculus and further they started to create their own project under the guidance of their respective faculty members. The details of the projects are furnished below.

Project Name: The Virtual tour of ECE Department in VR.

Project Team: Arvindh S,
Surya B,
B.E.IIIrd Year,
Government College of Engineering, Salem.

Project Faculty Mentor: Prof.M.Priadarsini

Objective: The main objective of this project is to develop a virtual 3D model of ECE Department and to experience it in Virtual Reality. All can experience the entire department and lab facilities and the lab equipment available in VR by using the VR Headset - Oculus Quest 2.

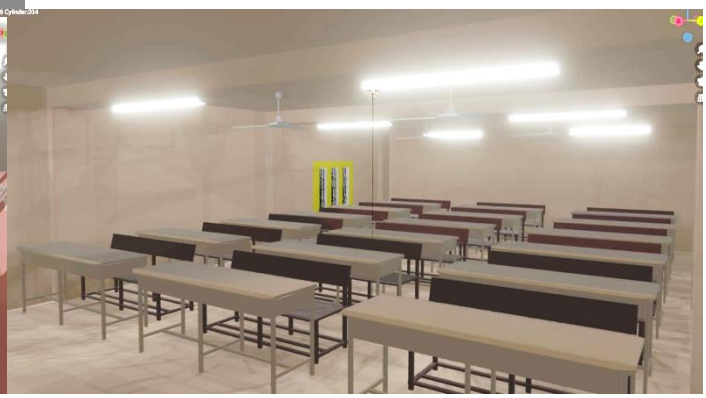
Design Tools :

1) Blender (Version 3.3) – Blender is used to design a 3D object.

Development Tools :

1) Unity Hub/Unity Editor (Version 2021.3.12f1) – Unity helps us to add a functionality to a 3D object that is designed in blender either by using different components available in Unity or by adding C# scripts .

Model developed Aerial View in gmap



Project Name: CSE Department 3D Model.

Project Team: Jeevanandham S, BE-CSE III Year,
Government College of Engineering, Salem.

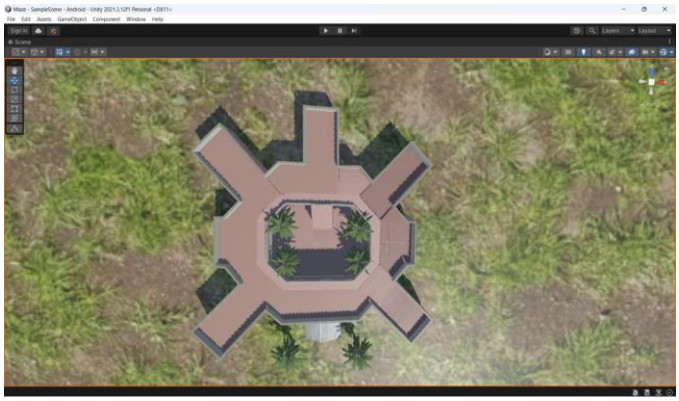
Project Faculty Mentor: Dr.R.GoldaBrunet

Objective: The main objective of this project is to create a virtual reality simulation of our department for the purpose of mapping for the new comers. Peoples can explore the

simulation of CSE department and labs furnished with equipment by wearing an oculus for virtual reality experience

DEVELOPMENT TOOLS:

1. **Blender –** Blender helps to make 3D models
2. **Unity -** Adding scripts and animations to the model and for exporting the project oculus.



Model developed

Aerial View in gmap

Facilities Available:

S.No.	Type	Hardware Facility	Software Facility
1	VR	1)Oculus Quest + All in One VR Headset. 2)VIVE Cosmos – PC Tethered.	1) Unity. 2) Unreal.

		3)Smartphone Based VR + Phone + Basic VR Headset.	3) Google Cardboard Dev Kit. 4) Steam. 5) Github.
2	AR	1) Android Tablet based AR+ Tab s7+. 2) Smartphone based AR+S21 5g 8/128. 3) iOS Apple iPad based AR – iPad pro 2021. 4) AR Glasses – Epson Moverio BT-200.	1) AR CORE. 2) AR Dev Kit. 3) Vuforia. 4) Apple AR Kit.
3	MR	1)HP Reverb. 2)Hololens 2.	1)Visual Studio with Universal Windows Platform. 2)Win-10 SDK. 3)Hololens Emulator. 4)Github. 5).net 6)Windows Device Portal.

The available Development Stations:

1) High End PC for Development.
2) iMac Pro 2021 Edition 27inch for Development.

The available General software are :-

1) GIMP.
2) Blender.

Photo Gallery:

Innovation Ecosystems:

The Tamil Nadu Startup and Innovation Mission (TANSIM) has approved the establishment of Fab-Markerspace Labs (InnovateTN Lab) at GCE, Salem, in Feb, 2022. PROTOSEM Incubation was inaugurated by Tamilnadu Chief Minister. It's vision is to innovate TN Lab; this proposal was approved to Forge, Coimbatore. PROTOSEM is an 18-week graduate innovation Engineer programme offered as a comprehensive skills and competency development programme that embeds an innovation-centred approach integrated into the Engineering curriculum. Student's efforts towards designing, developing, and deploying innovative solutions to the real-world problems the industry provides. In that process, they get transformed into employable people or entrepreneurs.

PROTOSEM Labs provide a range of facilities and equipment that enable individuals and communities to create and innovate using digital fabrication technologies.

The PROTOSEM Lab constitutes of the following machinery in our facility

1. CNC ROUTER: MODEL-STM 1325
2. Creality 3D Printer: CR- 10S PRO V2:
3. Flash Forge – 3D Printer: Creator 3 Pro:
4. CO2 LASER ENGRAVING & CUTTING MACHINE: MODEL-(SIL-9060)
5. Vinyl cutter: SKYCUT24
6. PCB Prototype Machine: Wegstr CNC -PCB
7. Precision Lathe FD 150/E –Proxxon

Along with the following equipment's several microcontrollers and electronic test equipment's are also available in the facility.

Trainees Enrolment Details			
Name of the Training Provider with full address	CIBI (Forge Innovation & Ventures), Forge Factory, #3, G Floor, KCT Tech Park, Athipalayam Road, Chinnavedampatti, Coimbatore - 641049	Timing	09:00 AM to 05:00 PM
Name of the Directorate	Directorate of Technical Education	Training Commenced on	08.02.2023
Name of the Training Center with full address	Government College of Engineering, Bangalore Highways,Salem, Tamil Nadu - 636011		
Course Name	ProtoSem	Training ends on	13.06.2023
Total no of Trainees	45		

Sl.No.	Reg. No.	Name of the Student as per College Record	Father Name	DOB	Gender	Year and Branch of study
1	2011046	Kavipriya M	Mathesweran V	02/11/2003	Female	III year, CIVIL
2	2011017	Devadhaa N A	Alagesan V	16/03/2003	Female	III year, CIVIL
3	2011035	Iffat Imtiyaz	Imtiyaz Ahmad Wani	28/10/2002	Female	III year, CIVIL
4	2011040	Joyce Lynette I	Immanuel P	29/08/2003	Female	III year, CIVIL
5	61772111L08	Kamali R	Raja P	10/07/2002	Female	III year, CIVIL
6	61772121L01	Athik Mohamed M	Mohammad Hafiz	21/01/2002	Male	III year, CSE
7	61772221T506	Ramakrishnaraj K	Kandasamy K	08/07/2003	Male	III year, CSE
8	61772221T507	Prabavathy S	Subramaniyan S	13/10/2002	Female	III year, CSE
9	61772221T503	Krishnan P	Palanisami P	26/10/2002	Male	III year, CSE
10	2021025	Pooja S	Stalin K	26/12/2000	Female	III year, CSE
11	2031001	Abineya S M	Murthi C	01/02/2003	Female	III year, ECE
12	2031006	Dharanyaa P	Palanivel R	11/06/2003	Female	III year, ECE
13	2131T301	Akshaya S	Sugavaneswaran M	04/05/2003	Female	III year, ECE

42	61772161L01	Balaji K R	Ramanathan K	22/05/2000	Male	III year, METALLURGY
43	2061038	Sankar P V	Venugopal P C	22/07/2002	Male	III year, METALLURGY
44	61772161L02	Dharush N	Neelamohan N	17/10/2001	Male	III year, METALLURGY
45	2061051	Vinithkumar R	Rameshbabu C	21/11/2002	Male	III year, METALLURGY

Signature of the SPOC

Signature of the training provider with Seal

Signature of the Principal with Seal

PRINCIPAL
GOVT. COLLEGE OF ENGG.
SALEM-636 011

FORGE
Innovation & Ventures

PROTOSEM
INNOVATION ENGINEERS

Program Schedule and Outline

Week 1	ProtoSem Orientation and Digital Onboarding
	Team and Agile challenges - Marshmallow Challenge
	Team and self leadership sessions
Week 2	Programming Paradigms concepts
	Industrial Design - 3D printing and laser cutting,
	Team and self leadership sessions
Week 3	Industrial Rapid Prototyping
	Basics of Electronics
	Protothon
Week 4	Computational Hardware - Arduino & TinkerCad
	Raspberry Pi, Sensors and actuators, Communication protocols
	Projects using Arduino and Raspberry pi
Week 5	Industrial Circuit board design
	Team and self leadership sessions + marketplace [Team formation]
	Problem statement identification and selection
Week 6	Applied Design Thinking principles
	Introduction to Forge Innovation Handbook
	Forge Innovation Rubric
	Problem validation and customer discovery
Week 7	Ideathon
	Applied Design thinking tools
	UI/UX - Expert session
Week 8	Python & Oops concepts
	Operating systems
	Web development

Week 9	Industrial Internet of things
	Assessments and Assignments
Week 10	Hacking the Forge Innovation Handbook
	Industrial Robotics part 1
Week 11	Industrial Robotics part 2
Week 12	Industrial Controllers I & Communication Protocols
	MUP Development
Week 13	Industrial Controllers II & Communication Protocols
	MUP Development
Week 14	Startup Fundamentals - Entrepreneurial mindset
	Ideas to enterprise
	MUP Development
Week 15	Minimum viable business
	IPR session
	MUP Development
Week 16	System thinking & Reverse Engineering
	Operating systems
	MUP Development
Week 17	Right Pitch, Pitch Right
	MUP Development
Week 18	Presentation preparation
	Pitch presentation to internal team SPOCs
	Final Presentation to startups / Industries
	Demo day

List of innovate Projects by the students during the AY 2022-23

Team	Register Number	Name	Department	Project	Industry / Innovation Themes	Industry Type
1	61772141L04	Mohamed Ashif R	EEE	To Develop a Cost-Effective Mql Applicator For Metal Working Machines That Utilize Multipoint Cutting Tool.	Self	Industry
	61772151T301	Aakash J	MECH			
	61772141L07	Shanmugapriya A	EEE		Factory AIoT & Industry 4.0	
	61772251T504	Sunilkanna S R	Mechanical			
	2061051	Vinithkumar R	Metallurgy			
2	2021028	Pooja S	CSE	Corrective Measures for Shipment of Parts	Elkayem	Industry
	61772161L01	Balaji K R	Metallurgy			
	61772221T507	Prabavathy S	CSE		Factory AIoT & Industry 4.0	
	2061038	Sankar P V	Metallurgy			
	2051084	Sanjay M	Mechanical			
3	2231T503	Dhevendran S	ECE	Overall Equipment Effectiveness of their plant	Elkayam	Industry
	2031003	Akilesh Parthasarathy	ECE			
	61772141T302	Aravinth K	EEE		Factory AIoT & Industry 4.0	
	61772161L02	Dhanush N	Metallurgy			
	2011046	Kavipriya M	Civil			
4	2051094	Viknesh S	Mechanical	Preventive/Predictive maintenance of HMC Machine	MicroTech CNC	Industry

	61772141T310	Karthikeyan K	EEE			
	2051084	Sridharan N	Mechanical		Factory AIoT & Industry 4.0	
	61772151T303	Jafar Shreef M	Mechanical			
	2011017	Devadhaa N A	Civil			
5	61772221T503	Krishnan P	CSE	IoT device coupled with Mobile computer for Vision-based Threat Alert system	Inferigence Quotient	Startup
	2051016	Darwin R	Mechanical			
	61772221T508	Ramakrishnaraj K	CSE		Defense & Aerospace	
	61772121L01	Athik Mohamed M	CSE			
	2011040	Joyce Lynette I	Civil			
6	2051062	Ranjith A C	Mechanical	Rugged PC	Inferigence Quotient	Startup
	61772151T308	Senthamaraikannan S	Mechanical			
	2051050	Nandagopal R V	Mechanical		Defense & Aerospace	
	2051044	Mariselvam M	Mechanical			
	61772141T305	Aruna V	EEE			
7	2031006	Dharanyaa P	ECE	Smart City Waste Management	Self	Industry
	2041002	Antony Issaq S	EEE			
	61772151L16	Sountharrajan A	Mechanical		Smartcities	
	2041047	Yongkong Onen B	EEE			
	2011035	Iffat Imtiyaz	Civil			
8	2051002	Abijith Chandran C V	Mechanical	Design and develop a 3U nanosatellite structure	Grahaa Space	Startup
	2031001	Abinaya S M	ECE			
	2041019	Kishore K	ECE		Defense & Aerospace	
	2131T301	Akshaya S	ECE			
9	2051001	Abhay Chandran C V	Mechanical	Design and develop a UHF / VHF Antenna & ground station for satellite tracking	Grahaa Space	Startup
	2041046	Yaswanth Raj M	EEE			
	2051047	Monish R	Mechanical		Defense & Aerospace	
	2041017	Kailash M	EEE			
	61772141T311	Kishore S	EEE			
	61772111L08	Kamali R	Civil			

Innovation Mentor Capacity Building Program for Faculty members by FORGE, Coimbatore **from 01.08.2022 – 05.08.2022 (5 days)**

This program extended training to develop the substantial skills and competencies in the areas of ideation, problem validation, customer discovery, prototyping tools and techniques, design thinking, innovation, business idea and model generation, business idea pitch preparation and presentation etc.,

The experts from various firms and industries and entrepreneurs nearby werevisited shared their business experiences, hurdles faced and how they recovered their business from the obstacles. On the day five, the commissioner of technical education participated the valedictory function through online and advised the participants to train the students to make them as an innovator and entrepreneur.

List of Participants for the “Innovation Mentor” Program held 1/8/22 to 5/8/22

S.No	Name	Designation	Department	College
1	Dr. K.T. Thilagham	Assistant Professor	Metallurgy	GCE Salem
2	Prof.R.Vinothbabu	Assistant Professor	Metallurgy	GCE Salem
3	Prof. D.Manibharathi	Assistant Professor	ECE	GCE Salem
4	Prof. M.Priadarsini	Assistant Professor	CSE	GCE Salem
5	Prof.P.Deepthi	Assistant Professor	ECE	GCE Salem
6	Dr.T.Murugesan	Assistant Professor	Civil	GCE Salem
7	Prof.M.Raffikbasha	Assistant Professor	Civil	GCE Salem

8	Dr.V.Satheeshkumar	Assistant Professor	Mechanical	GCE Salem
9	Dr. D. Murali	Professor	EEE	GCE Salem
10	Dr.K.Sakunthala	Assistant Professor	Mechanical	GCE Salem
11	Dr.R.Golda Brunet	Assistant Professor	Computer Science	GCE Salem
12	Dr.G.Suganthi	Assistant Professor	Physics	GCE Salem
13	Dr.P.Manivannan	Assistant Professor	Mathematics	GCE Salem
14	Prof. R Jayashree	Assistant Professor	Mechanical Engg.,	GCE Bodinayakkanur
15	Dr. S Akbar	Assistant Professor	Chemistry	GCE Bodinayakkanur
16	Prof. M.Arunkumar	Assistant Professor	EEE	GCE Thanjavur
17	Thiru. M. Murugan	Assistant Professor	Mechanical Engg.,	GCE Dharmapuri
18	Dr. G. Dinesh	Assistant Professor	ECE	GCE Dharmapuri
19	Dr.S.Kumar	Assistant Professor	Production Engg.	GCT Coimbatore
20	Tmt. M. Kantha Shoba	Associate Professor	Mechanical Engg.,	Vellore
21	Dr. T. Suja	Assistant Professor	Mechanical Engg.,	Vellore
22	Tmt.K. Renugadevi	Assistant Professor	ECE	GCE Thanjavur
23	Thiru. S. Tamil Prabakaran	Assistant Professor	Mechanical Engg.,	GCE Bargur
24	Dr. D. Thirumalaikumarasamy	Assistant Professor	Mechanical Engg.,	GCE Bargur
25	Dr. R. Francis	Assistant Professor	EEE	GCE Bargur
26	Thiru. R. Ranjith	Assistant Professor	ECE	GCE Bargur
27	Thiru. T. Mohandoss	Assistant Professor	ECE	GCE Bargur
28	Thiru. S. SathishKumar	Assistant Professor	Mechanical Engg.,	GCE Bargur
29	Thiru. M. Anantha Babu	Assistant Professor	Mechanical Engg.,	GCE Bargur
30	Dr. J. Manimaran	Assistant Professor	CSE	GCE Bargur

31	Dr. V. Mohanram	Counselling Trainer	RUSA	RUSA Madurai Kamarajar University

Ranking

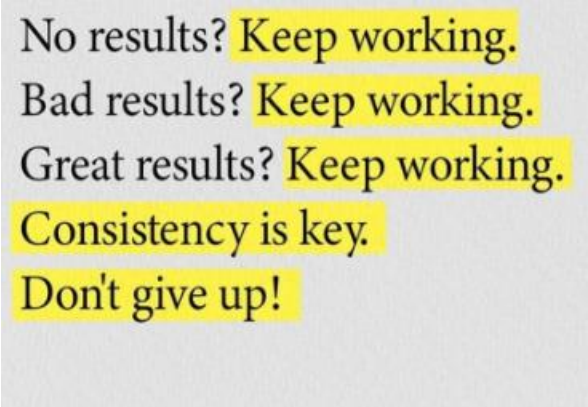
GCE, Salem works to enhance teaching and learning methods and emphasize the curriculum. The regulations and curriculum has the provisions such as Internship, Project/Mini Project, Field visit, Language Laboratory, In plant Training, Self-study courses, Break of study permitted, Open Electives, Value added courses, SWAYAM/MOOC courses, Audit and mandatory courses as per the AICTE model curriculum.
Research and professional practise are encouraged among faculty members of GCE, Salem. Seed money was provided to the faculty members attending conference and programme on thrust areas of research. The Augmented Reality and Virtual Reality Laboratory was established in the Research and Development block at Government College of Engineering, Salem during May 2022. The lab is Air Conditioned with the facilities of High End Personal Computers with Wi-Fi/Ethernet Service. The lab consists of Hardware Components worth Rs.23,60,000 and software materials worth Rs.23,69,052.

Government College of Engineering, Salem-11, was started during the Third Five year plan in the year 1966 and is located on a 162 hectares site surrounded by hills GCE,Salem was then the Third Engineering Institution in Tamil Nadu. The first batch of students was selected for the academic year 1966-1967.The institution offers 6 UG and 6 PG programmes. The students get admission through Tamilnadu Engineering Admission (TNEA) based on TNEA rank list and counselling. Students show interest for admission in GCE, Salem. There is best outreach of GCE, Salem.

The placement percentage of students in each department is as below.

Department	Total Number of Students opted For Placement	Total number of students placed	Placement percentage (%)
Civil	45	35	77.78
Computer Science	40	38	95.0
ECE	40	34	85.0
EEE	47	47	100
Mech	95	95	100
Mett	49	42	85.71
Total	316	291	92.09

Alumni Association of Government College of Engineering, Salem contributes significantly to the development of the institution through financial and non-financial means. The donations received from the alumni are deposited as corpus funds in the Alumni Association of Government College of Engineering Salem. Account and the interest earned from that is used for distributing scholarships to the meritorious and financially weak students. Donations are exempted under Section 80G of the Income Tax Act. Alumni have provided Alumni Centre, especially for the purpose of conducting campus interviews and

other important meetings. The cost involved in the construction and facilities of the Alumni Centre is about rupees one crore. The college invites senior Alumni as speakers for various programs organized by the departments. The Alumni Association actively participates and concentrates on college development. The Alumni members contribute various services to the institution like arranging visits to their industries for the students along with faculty members, providing student internships, providing project works, providing jobs to the students through campus placements, and contributing learning resources to the library. The Alumni also mentor the students. Alumni Scholarship and placement activities were offered to the students of all departments. Brush cutter for college purchased sponsored by 1972 batch alumni. Er.Chithra,EE,TNEB,Mettur ,Alumni of EEE contributed more than 100 books.

The Hon'ble Minister of Higher Education Department made an announcement in thefloor of assembly for Construction of Indoor Stadium in 10 Engineering colleges towards the enhancement of sports facilities in Government Engineering colleges. The Government have accorded Administrative sanction vide G.O. (Ms). No.123 Higher Education (B1) Department dated : 01.07.2022 for Rs.8.00 crores in Government College of Engineering, Salem-11.The indoor stadium includes 4 no.s of court room for ball badminton (6.10m x 13.40m), 1no of basket ball court (28.65m x 15.24m), Dormitory hall for Gents & Ladies, Coach room, Dress changing room for boys & girls, Store room, Gym area, Separate zones for games like Table tennis, Carrom, Chess and other indoor games. There is provision for gallery in the first floor with seating capacity of 250 no.s, raised stage in ground floor, Stair case 4 no.s which includes emergency stair and a portico facility. The flooring can be made with synthetic flooring for playing court area and galleries are finished with grano flooring and coach room & dormitory are with double chargedvitrified tiles.