



MINISTRY OF DEVELOPMENT OF
NORTH EASTERN REGION



Prime Minister's
Development Initiative
for North East Region
(PM-DevINE)

Digital Design and 3D Printing Center of Excellence in the Electronic Manufacturing Cluster (EMC) in collaboration with other Government Agencies to be located at Tech City, Guwahati

IDEATION HACKATHON

In order to harness the full potential of 3D Printing with involvement of local stakeholders of NER, a series of discussions were held with partner universities / educational institutions of the region and it was decided that a 2 Stage Hackathon shall be held to shortlist 5 Teams who can be awarded the prize money to kick start 3D Printing Innovation and Enterprises in NER. The first stage is an “Ideation Hackathon” to synthesize diverse ideas, proof of concepts and shortlist a few of them who can be mentored for a month by Subject Matter Experts under the umbrella of their partner / mentor educational institution to take them to the final stage. **The schedule for NER is as follows:**

Full schedule to be typed here with venue.

S. No	Date	States	Venue
1.	07/06/2024	Assam	IIIT, Guwahati
2.	10/06/2024	Sikkim	Sikkim Manipal Institute of Technology, Majitar, Sikkim
3.	11/06/2024	Arunachal Pradesh	NERIST, Nirjuli, Itanagar
4.	13/06/2024	Meghalaya	NEHU, Shillong
5.	14/06/2024	Manipur	Manipur Institute of Technology, Manipur University, Imphal, Manipur
6.	17/06/2024	Agartala	Tripura University, Agartala
7.	18/06/2024	Nagaland	Naga Hospital Authority, Kohima
8.	21/06/2024	Mizoram	Software Technology Park Of India, Aizawl
9.	24/06/2024	Assam	Assam University, Silchar

AMTRON is in coordination with All India Radio shall be the publicity partner to cover the events all across NER prior to commencement of these events.





FINANCIAL SUPPORT FOR 3D PRINTING SME'S IN NER

In recent years, 3D printing has revolutionized various industries, providing endless possibilities for innovation and customization. In order to support SMEs / Self Help Groups to harness tools of 3D Printing for starting micro enterprises in NER, a workshop was organized for the officials of the Regional Directorate of KVIC (Khadi Village Industries Commission) in Guwahati to discuss the business models which can be funded under PMEGP Program.



Workshop



As per directions of KVIC, a meeting is scheduled to be held in the last week of June, 2024 with prominent bankers of NER on the appraise them on the same and move ahead with funding of Pilot Projects.





MENTORSHIP SUPPORT FROM IIM, SHILLONG

Engagement With Dr. APJ Abdul Kalam Centre for Policy Research and Analysis under IIM, Shillong: Dr. APJ Abdul Kalam Centre for Policy Research and Analysis was created by a tripartite agreement between IIM Shillong and the Ministry of Development of North Eastern Region (MDoNER) in 2016 and it helps implementing agencies to properly plan and execute projects, promote innovations and function as a repository of best practices in the region, especially in development planning. The Center has consented to work closely and mentor / support / guide all the partner institutions in the region to fast track the journey of Industry 4.0 supported Digital Industrialisation of NER.

IIM, Shillong Meeting



Prime Meghalaya

Meghalaya State Government has a comprehensive program namely PRIME (Promotion and Incubation of Market-driven Enterprises) that looks at enterprise promotion and incubation in a holistic manner. AMTRON held a detailed meeting with Program Head of PRIME in Shillong to discuss the potential of this technology and use the learnings of PRIME initiative to take this tech deeper into the hinterland at grassroots level.





PROMOTING WOMEN IN 3D PRINTING

In order to address the SDG 2030 Gaps of miniscule participation of Women in STEM Education / Tech Sector Jobs / Enterprises and reduce digital divide, AMTRON has partnered with NIFT, Shillong, Hand for Handmade Foundation in Mumbai, Industry Partners and Women In 3D Printing to help mentor women entrepreneurs from across NER to help them become a major stakeholder in the potential that this industry offers and some models (Jewellery design, hybrid furniture making, gifts and accessories, mobile dental healthcare etc) shall go live in July 2024 showcasing Women owned and operated 3D Printing Enterprises in NER.



The following agencies shall play a Pivotal Role in handholding and mentoring MSME Entrepreneurs from NER through Pilot Projects in July, 2024:

1. KVIC (Khadi Village Industries Commission),
2. Arunachal Pradesh Industrial Development Financial Corporation Limited
3. Assam University, Silchar
4. Regional Dental College, Guwahati





ENGAGING WITH OIL AND GAS INDUSTRY

The small town of Digboi, located in the remote northeastern corner of India, holds a significant place in the country’s oil industry and is the Gangotri of the Indian Hydrocarbon sector since the first Oil Well was Dug up here in 1866 and Digboi Refinery, commissioned in 1901 which is not only India’s oldest operating refinery but also one of the oldest operating refineries in the world.



In order to showcase the potential of Digital Twins and 3D Printing in the Oil & Gas Industry and educate future Petroleum Engineers about the benefits of the proposed Technology at “Assam Energy Institute, Sibsagar” which is the NE campus of Rajiv Gandhi Institute of Petroleum Technology, Amethi.



Further, a live demonstration was held in Numaligarh Refinery Limited (NRL) at Golaghat District of Assam wherein some spare parts were scanned and Digital Twin created using reverse engineering tools. The spare parts have been 3D Printed and handed over to the customer.





DEEPER ENGAGEMENT WITH HEALTH SECTOR

As Digital Designing and 3D Printing has extensive applications in improving the quality of medical education as well as quality of treatment offered, hence practical demonstrations have been held with 3D Printed Parts to help them understand the benefits that they can give to patients locally instead of incurring high out of pocket expenses in getting treatment in big cities.







ORIENTATION SESSION OF MASTER TRAINERS TO CONDUCT MOOC COURSES IN NER

The MOOC Courses on 3D Printing have been certified by NITTTR (National Institute of Technical Teachers Training & Research), Ministry of Education, Government of India. AMTRON organized the first orientation session for Master Trainers representing different educational institutions from all across NER and the session was conducted by Dr Sharad Pradhan, Director, THDC-Institute of Hydropower Engineering and Technology, Tehri, Govt of Uttarakhand. The session was conducted at Tech City, Guwahati.

