Objective of the procedures for intellectual property is proposed to train the academicians, scholars, and industry above mentioned is a dire need to train the academician and students in the practices are not often. Engineering standards, permission, using, dealing or tampering with his/her product crystallized. They also entitle him/her to prevent others from applications. Trademarks, literature, symbols, names, brands including creativity concepts, inventions, industrial models, make the components that can interface with other requirements, and practices.

Overview of the™

Teaching Learning Centre of NIT Warangal: The Teaching-Learning Centre (TLC) is established at NIT Warangal with grants from the Ministry of Human Resource Development, Government of India under the scheme, ‘Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching’ (PMMMNMTT). Under this scheme a separate building for TLC with the state-of-art training facilities which include a studio for video recording of lectures is going to come up. Many senior and young faculty members across various departments of the Institute are associated with this center as members of the Core-Team.

One of the important objectives of the center is to conduct short term and medium term training programs for Newly Inducted Teachers, In-Service Teachers and Teacher-Aspirants in Science and Engineering disciplines, so as to enhance their skills.

Other activities of the TLC include preparation of e-learning materials, offering courses on-line, curriculum development, carrying out research in pedagogy and integrating ICT into teaching-learning process.

About NIT Warangal:
National Institute of Technology Warangal, formerly known as Regional Engineering College was established in 1959. Over the years it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 13 Departments offering eight undergraduate and 32 post-graduate programmes besides doctoral programmes. About 5000 students across the country and about 500 international students study in the campus. It is a fully residential campus sprawling over 250 acres with excellent infrastructure, state of the art library, seminar halls, guest houses and laboratories.

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Overview of the FDP:

3D printing is defined by the ASTM F42 committee as the fabrication of objects through the deposition of a material using a print head, nozzle, or other printer technology. However, the term is often used synonymously with additive manufacturing (AM). In particular, it is associated with machines that are lower in relative price and overall functional capability. 3D Printing is used to build physical models, prototypes, patterns, tooling components, and video games to produce parts in a way that is prohibitively expensive or impractical by other means. Digital cameras, mobile phones, engine parts, parts for medical, and military markets, to name just a few. Printed parts for products in the consumer, industrial, design, and manufacturing companies are examples of a very long list of products which are benefited by the 3D Printing technology.

Objectives:
1. To update the participants with the state of the art technologies in metal 3D printing.
2. To provide hands-on experience to the participants on the 3D modeling, STL file generation, build-setup preparation, 3D printing and post-processing techniques through hands-on sessions.
3. To enable participants to learn the industrial, real life and pedagogical applications of 3D printing.
4. To empower the teaching and learning capabilities of the participants with emphasis on improvisation of their teaching skills of advanced topics of metal 3D printing technology.

Topics to be covered:
- 3D printing emerging trends
- 3D printing file formats and software
- 3D printing process planning
- Polymer and ceramic printing processes
- Metal printing by LBM, EBM, DED, WAAM
- Powder characterization, micro structural and mechanical properties of AM
- 3D printing applications in automobile, aerospace, medical/dental etc.
- Hands-on experience on solid modelling, STL file generation, build-setup preparation, polymer and metal printing, post-processing methods.

Resource Persons:
Eminent faculty from IITs and NITs, Scientists from ARCI, DMRL, RRCAT, Engineers from 3D printing industries and Faculty from NIT Warangal, will deliver lectures, conduct workshop sessions and laboratory sessions.

Registration is open to:
Faculty members of engineering colleges working in mechanical/production/industrial engineering and allied departments.
Research Scholars, who have an aptitude to work in the area of 3D printing and desire to take up teaching profession as their career.

How to Apply:
Eligible candidates may apply by submitting the scanned copy of the filled in registration form without registration fee (attached with this mail/brochure) by Email to yrk@nitw.ac.in on or before 06th March, 2020.

Note: Participants are encouraged to bring their own laptops.

Selection and Intimation:
On receipt of the registration form, participants will be sent confirmation of their participation through email immediately. Then, they can send the registration fee on or before 10th March, 2020.

Registration fee:

<table>
<thead>
<tr>
<th>Category</th>
<th>Local participants with lunch</th>
<th>Outstation Participants with accommodation breakfast, lunch, dinner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>Rs. 750/-</td>
<td>Rs. 1500/-</td>
</tr>
<tr>
<td>Research Scholars</td>
<td>Rs. 400/-</td>
<td>Rs. 800/-</td>
</tr>
</tbody>
</table>

(Working lunch will be provided for all the participants on all the days of the workshop)

Note: Registration fee for Faculty and Research Scholars of SC/ST category is half of the amounts mentioned above, as applicable.

Accommodation:
Accommodation for the outstation participants will be provided upon request in the Institute Students Hostels only subjected to availability and as per the Institute rules on first come first served basis.

As the programme is conducted in a workshop mode with hands-on sessions, the number of participants in the workshop is limited to 40. Candidates are advised to register early to avoid disappointment.
A Six-Day Faculty Development Programme on
Teaching and Learning of Metal 3D Printing Technology
Through Hands-on Experience

19th – 24th March 2020

Organized by the
Department of Mechanical Engineering
In Association with the
Teaching Learning Centre of NIT Warangal
Under the MHRD’s PMMMNMTT Scheme

REGISTRATION FORM

Name: __________________________________________

Date of Birth: __________________________________

Place of Birth: Village/Town/City: __________________ District: __________________

Tick as applicable (Rural / Urban): __________________ State: ____________________

Aadhaar number: __________________________ Gender (Put a ✓ Mark) M F

Category (Tick as applicable): Open / OBC / SC / ST / PWD

Qualification: ______________________________________

Designation: ______________________________________

Organization: ______________________________________

No. of Years of Teaching Experience: ________________________

Address for Correspondence:

________________________________________________________________________

________________________________________________________________________

Mobile(s): __________________________ E-mail(s): __________________________

Accommodation: ☐ Required ☐ Not Required

Payment Details (DD)**: Amount: __________________ DD No.: __________________

Date: __________________ Bank: __________________ Branch: __________________

Declaration by the Applicant
If selected, I agree to abide by the rules and regulations of the workshop/training programme and shall attend all the sessions.

** Kindly go through the brochure before making payment (Payment should be done only after confirmation from the coordinator)

Date: __________________ Signature of the Applicant

Recommended and Forwarded

Office Seal __________________ Signature of the Head of the Department / Institution