**About the Programme**

Assistive Technology is exploring different problems faced by the differently able people and finding the suitable technology/solution to overcome the difficulties. The programme’s objective is to impart the required skills for transforming student projects to commercial assistive products.

After the completion of this course, the participants will be able to:
- Guide the students to choose the right project undertaking bridge course, though client visit and market study for catering assistive needs
- Assess the project feasibility including component selection
- Interface microcontrollers, sensors, communication modules and actuators
- Develop few Assistive Devices

**ATAL Academy**

AICTE Training and Learning (ATAL) Academy is established with the vision “To empower faculty to achieve goals of Higher Education such as access, equity and quality”. First AICTE Training And Learning (ATAL) Academy and NWRO (Camp Office) of AICTE in Jaipur was digitally announced with establishment of its other centers in the country at Jaipur, Vadodara, Guwahati & Trivandrum. Also, ATAL academies are announced where AICTE Camp offices are situated. ATAL academy will conduct a series of workshops in thrust areas identified by AICTE.

**Topics**

- Introduction to Assistive Technology
- Process of transforming student projects to commercial assistive products through client visit/project selection/market study/Design review/field testing and feedback from clients/ Commercialisation
- Overview of microcontrollers, sensors, power supplies, actuators, communication protocols
- Soldering of Hardware Components- Programming microcontrollers such as Arduino, Raspberry Pi and interfacing communication devices, Sensors, Actuators.
- Discussion on questionaries’ during client visit for problem identification
- Hands on Lab Sessions
- Patent Drafting
- Start-up opportunities in Assistive Technology

**Resource Persons**

Resource persons are from IITs, NITs, Universities, Industry and R & D organizations

**Eligibility**

The participants to the course will be faculty & Ph.D Scholars from AICTE approved technical institutions.

**Important Dates**

- **Last date for receipt of application**: 19-11-2019
- **List of selected participants will be intimated through mail**: 20-11-2019

**Registration and Fee Details**

There is no Registration fee from any participant. No TA/DA will be paid to any participant. Participants will have to make their own stay arrangement during the five days. Only tea during sessions/working lunch will be provided to the participants. On completion of the programme on all the days, participants will be awarded a Certificate of participation by respective ATAL Academy.

Early information on e-mail for registration is appreciated.

**REGISTRATION FORM**

Five-day workshop under AICTE Training and Learning (ATAL) Academy on

**ENGINEERING PROJECTS FOR ASSISTIVE TECHNOLOGY NEEDS**

25-11-2019 to 29-11-2019

DEPARTMENT OF ELECTRICAL ENGINEERING
NIT ANDHRA PRADESH - 534101

1. Name:________________________
2. Designation:__________________
3. Organization:__________________
4. Address for correspondence with e-mail:

____________________________________________

5. Telephone / Mobile No:_______________
6. Teaching Experience:__________________
7. Research area:________________________

**Declaration**

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the course and shall attend the course for the entire duration.

**Place:**

**Date:**

Signature of the Applicant

Signature of the Head of the Department
About the Institute
National Institute of Technology, Andhra Pradesh is the 31st institution among the chain of NITs started by the Government of India. NIT Andhra Pradesh is established in the state of Andhra Pradesh recently in the academic year 2015 – 2016.

CPWD has taken up the activity of construction of Academic, Hostel, Guest House and Admin buildings in Phase-I. Expected date of completion of Phase-I building in March 2019. Immediately Phase-II will be executed. HEFA / MHRD has sanctioned Rs. 400cr for infrastructure and development.

About the Department
The department offers B.Tech. and PhD program in Electrical Engineering. The department is in process of establishing state of art laboratories for the teaching and research purposes. The faculty members have a strong sense of responsibility to uplift the students in achieving professionalism. faculty expertise include Power Systems, Power Electronics, Digital signal processing, Embedded systems, Electrical Machines, HVDC Transmission, FACTS Controllers, Control Systems, Smart Grids, Energy Management, Machine learning and Application of optimization techniques in Power Systems and Power Electronics.

Address for Correspondence
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Patron
Prof. C.S.P. Rao
Director, NIT Andhra Pradesh
Convener & Coordinator
Dr. Sankar Peddapatari, Asst.Prof. & Head, EED

Organizing Members
Dr N. Jayaram                        Assistant, Prof., EED
Dr T. Ramesh                         Assistant, Prof., EED

Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Time</th>
<th>Session 1: Introduction to Assistive Technology</th>
<th>High Tea</th>
<th>Session 2: Bridge course: Overview of micro-controllers</th>
<th>Lunch</th>
<th>Session 3: Bridge course: Actuators, sensors and Power Supplies</th>
<th>Tea</th>
<th>Session 4: Bridge course on communication protocols and interface</th>
<th>Lunch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov/25/2019</td>
<td>Registration</td>
<td>10.00 AM</td>
<td>Inauguration</td>
<td>11.30 AM</td>
<td>Session 1: Introduction to Assistive Technology</td>
<td>12.00 PM</td>
<td>Session 2: Bridge course: Overview of micro-controllers</td>
<td>Tea</td>
<td>Session 3: Bridge course: Actuators, sensors and Power Supplies</td>
<td>Tea</td>
</tr>
<tr>
<td>Nov/26/2019</td>
<td>Lunch</td>
<td>12.00 PM</td>
<td></td>
<td>12.00 PM</td>
<td>Session 2: Bridge course: Overview of micro-controllers</td>
<td>12.00 PM</td>
<td>Session 3: Bridge course: Actuators, sensors and Power Supplies</td>
<td>Tea</td>
<td>Session 4: Bridge course on communication protocols and interface</td>
<td>Tea</td>
</tr>
<tr>
<td>Nov/27/2019</td>
<td>Session 5:</td>
<td>12.00 PM</td>
<td></td>
<td>12.00 PM</td>
<td>Session 5: Soldering Practice</td>
<td>12.00 PM</td>
<td>Session 4: Bridge course on communication protocols and interface</td>
<td>Lunch</td>
<td>Session 6: Hands-on lab to work with different micro-controllers, actuators, sensors and communication protocols</td>
<td>Tea</td>
</tr>
<tr>
<td>Nov/28/2019</td>
<td>Session 6:</td>
<td>12.00 PM</td>
<td></td>
<td>12.00 PM</td>
<td>Session 6: Hands-on lab to work with different micro-controllers, actuators, sensors and communication protocols</td>
<td>12.00 PM</td>
<td>Session 6: Hands-on lab to work with different micro-controllers, actuators, sensors and communication protocols</td>
<td>Tea</td>
<td>Session 6: Hands-on lab to work with different micro-controllers, actuators, sensors and communication protocols</td>
<td>Tea</td>
</tr>
<tr>
<td>Nov/29/2019</td>
<td>Session 7:</td>
<td>12.00 PM</td>
<td></td>
<td>12.00 PM</td>
<td>Session 7: Hands-on lab to work with different micro-controllers, actuators, sensors and communication protocols</td>
<td>12.00 PM</td>
<td>Session 7: Hands-on lab to work with different micro-controllers, actuators, sensors and communication protocols</td>
<td>Tea</td>
<td>Session 7: Hands-on lab to work with different micro-controllers, actuators, sensors and communication protocols</td>
<td>Tea</td>
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AICTE Training and Learning (ATAL) Academy
Nampet Phase-III
Five Day Workshop on
ENGINEERING PROJECTS FOR ASSISTIVE TECHNOLOGY NEEDS
25-11-2019 to 29-11-2019

Coordinator
Dr. Sankar Peddapatari
Assistant Professor, Dept. of EE

Organized by
DEPARTMENT OF ELECTRICAL ENGINEERING
NIT ANDHRA PRADESH - 534101
Website: www.nitandhra.ac.in