

## SPONSORSHIP

Prof./Dr./Mr./Mrs./Miss \_\_\_\_\_

is an employee of our institute and his/her application is hereby sponsored. The applicant will be permitted to attend the Workshop on “**Development of Embedded Systems using ARM Cortex M4 Processors**” at National Institute of Technology, Patna during 7<sup>th</sup> August, 2017 – 12<sup>th</sup> August, 2017, if selected.

Date: \_\_\_\_\_ Signature of Head of  
Institution/Sponsoring Authority

Designation: \_\_\_\_\_

Official Seal: \_\_\_\_\_

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- Note:** 1. Interested candidates shall email the advance scanned copy of their registration form along with scanned copy of demand draft (non-refundable).  
2. Selection will be made purely on First-Come-First-Serve basis (Selection is valid subject to fulfilling the eligibility criteria & realization of Registration Fee).  
3. Maximum Fifty (50) participants will be accommodated in the STC.
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The duly sponsored registration form along with original DD (non-refundable) should be mailed to:

**Dr. Arunangshu Ghosh**  
**Coordinator,**  
**Development of Embedded Systems using ARM Cortex M4 Processors.**  
**Department of Electrical Engineering**  
**National Institute of Technology Patna**  
**Patna - 800 005, Bihar, India.**  
**Email: [arunangshu.ghosh@nitp.ac.in](mailto:arunangshu.ghosh@nitp.ac.in)**  
**Phone: 09523592769.**

## PATRON

**Prof. (Dr.) Asok De**  
Director, NIT Patna

## CHAIRMAN

**Prof. Uday Shankar Triar**  
Professor and Ex-HOD, Department of Electrical Engineering,  
NIT Patna

## COORDINATOR

**Dr. Arunangshu Ghosh**  
Department of Electrical Engineering, NIT Patna

## ADVISORY COMMITTEE

1. Prof. S. N. Verma, NIT Patna, Head Dept. of Elect. Engg.
2. Dr. Bharat Gupta, PI E&ICT Academy, NIT Patna
3. Prof. M. M. Choudhary, NIT Patna
4. Prof. G. K. Choudhary, NIT Patna
5. Prof. Ramesh Kumar, NIT Patna

## ORGANISING COMMITTEE

6. Dr. Mala De, NIT Patna
7. Dr. Nishat Anwar, NIT Patna
8. Dr. Vimlesh Verma, NIT Patna
9. Ms. M. Bhattacharya, NIT Patna,

## IMPORTANT DATES

Email with scanned copy of registration form along with scanned copy of DD may be sent latest by **July 21, 2017**.

Duly filled registration form along with sponsorship certificate & original DD drawn in favour of National Institute of Technology Patna payable at Patna should reach on or before **July 21, 2017**.

Intimation about selection will be sent by email only latest by **July 21, 2017**.

## Registration Fee (Non-refundable):

Rs. 5000/- (For Persons from Industry).  
Rs. 3000/- (For Faculty Members)  
Rs. 1500/- (For Research Scholars).

## Six Day Faculty Development Programme (FDP)

on

**“Development of Embedded Systems  
using ARM Cortex M4 Processors”  
7<sup>th</sup> August, 2017 – 12<sup>th</sup> August, 2017**

**Under the E & ICT Academy, NIT Patna**

**Coordinator**

**Dr. Arunangshu Ghosh**

Email: [arunangshu.ghosh@nitp.ac.in](mailto:arunangshu.ghosh@nitp.ac.in)  
Phone: 09523592769



**Department of Electrical Engineering**  
**National Institute of Technology Patna**  
**Patna- 800005 (India).**  
Website: [www.nitp.ac.in](http://www.nitp.ac.in)

## ABOUT THE INSTITUTE

National Institute of Technology Patna is the 18<sup>th</sup> National Institute of Technology created by the Ministry of H.R.D. Government of India after rechristening the erstwhile Bihar College of Engineering Patna on 28.01.2004. NIT Patna marked its humble beginning in 1886 with the establishment of pleaders survey training school which was subsequently promoted to Bihar College of Engineering Patna in 1924. This made this institute the 6<sup>th</sup> oldest Engineering Institute of India. The graduate level curriculum was later elevated to the post graduate level in 1978.

NIT Patna has been declared as an Institute of National Importance and centre of excellence under NIT Act 2007 Government of India. It is imparting high quality education & values at Under Graduate level in B. Arch/ B. Tech, Post 5 Yr Integrated M. Sc., MURP/ M. Tech), Dual Degree (M.Tech + Ph. D) & Ph. D programme through its experienced faculty well versed in their respective field of engineering and technology. At present the institute has different disciplines such as Architecture, Civil Engg., Computer Science & Engg., Elect. Engg., Electronics & Communication Engg., Mech. Engg and Science departments: Mathematics, Chemistry and Physics.

The campus of NIT Patna is located at the heart of the city, which is around 8 km from Patna Jn. Railway station and about 20 km from the Jai Prakash Narayan International Airport Patna. The city of Patna is well connected with the other major cities of the country and states by rail, road and air.

## OBJECTIVES

The programme will be a comprehensive workshop covering ARM architecture, building blocks, key features and programming. The course will cover programming ARM processor based TM4C123GH6PM microcontroller for embedded applications and development of embedded systems using the same.

The primary purpose of the workshop is to introduce the participants to the ARM architecture and other theoretical aspects of the same, and also to impart them the hands on sessions to inculcate the ability of project development and problem solving abilities. The will be not only be a Faculty Development Program (FDP) but also a training programme suitable for PhD students, and Industry persons working in this area.

## SPEAKERS

1. **Prof. SK Sinha**, Adj. Professor, NIT Patna, Prev. Prof., Founder & Director Lab2Market, IISc, Bangalore.
2. **Prof. D. Vasavada**, Visiting Professor IISc Bangalore and CEO STAMP Computers.
3. **Mr. Milind Trivedi** (Assistant Professor, CKPET, Surat)

## CONTENT OF FDP:

1. Overview of Embedded Systems
2. Introduction to modern processor architecture
3. ARM Cortex M3/M4 Architecture
4. Compiler Tool chain, – compiler, linker and debugger in Keil Programming Platform
5. Familiarization with TIVA TM4C123G LaunchPad Board from TI.
6. Programming the TM4C123GH6PM microcontroller
7. Software architecture of an OS less system
8. Introduction to RTOS
9. Implementation of GPIO, Timers, UARTs and ADC interfaces.
10. Development of Embedded applications and systems

## ELIGIBILITY:

The STC is open to faculty members, and research scholars from **Electrical/ Electronics/ Electronics and Instrumentation Engineering/ Computer Science and related disciplines** from Universities / Institutes / Engineering Colleges approved by AICTE / UGC.

## HOW TO APPLY:

1. Registration form should accompany a single demand draft of Rs 5000/-, Rs 3000/- or Rs. 1500/- (non-refundable), as applicable, which should be drawn in favour of "Director, NIT Patna" payable at Patna. Online payments of registration fee may be done in the following Account Name: NIT Patna Account No: 50380476798, IFSC: ALLA0212286.
2. Scanned copy of duly filled up registration form, sponsorship certificate and the NEFT transaction slip or demand draft must be e-mailed to: [arunangshu.ghosh@nitp.ac.in](mailto:arunangshu.ghosh@nitp.ac.in). Hard copy of the same must also be sent by post/ courier.
3. Selection will be made purely on First-Come-First- Serve basis (Subject to fulfilling the eligibility criteria).
4. Maximum Fifty (50) participants will be accommodated in the workshop.
5. The brochure and the registration form may be downloaded from the Institute website [www.nitp.ac.in](http://www.nitp.ac.in)

## GENERAL INFORMATION:

1. No TA, DA will be provided to the participants.
2. Hostel Boarding & Lodging will be provided by Institute and is included in the registration fee.
3. Participants will be provided high tea, lunch etc. during the day session from 7<sup>th</sup> August, 2017 – 12<sup>th</sup> August, 2017.
4. Participants will be provided registration kit & course materials.
5. Intimation of Selection will be sent only through email.

## Six Day

**Faculty Development Programme (FDP)**  
**“Development of Embedded Systems**  
**using ARM Cortex M4 Processors”**  
**Under the E & ICT Academy, NIT Patna**  
**(August 7, 2017 – August 12, 2017)**

## Registration Form

1. **Name (Block Letters):**

2. **Gender:**

3. **Cast:**

4. **Domicile State:**

5. **Designation:**

6. **Organization:**

7. **Address for Communication:**

8. **Email (Mandatory):**

6. **Mobile Number (Mandatory):**

9. **Qualification:**

10. **Specialization:**

11. **Subjects Taught (UG & PG levels):**

12. **Teaching Experience (Years):**

13. **Research Experience (Years):**

Please register me for the course “Development of Embedded Systems using ARM Cortex M4 Processors” to be held at E&ICT Academy, NIT Patna.

Date:

Place:

Signature of the Applicant