



Department of Electronics & Telecommunication Engineering



Skill Development Program
on
SoC Design Methodology Using Intel FPGAs
In Collaboration with Intel Technology India
Pvt Limited.

Organized by Department of Electronics &
Telecommunication Engineering (ETE).

From 22nd to 26th August 2022



**SCIENCE IS ABOUT KNOWING,
ENGINEERING IS ABOUT DOING.**



Late Sri B. M. Sreenivasaiah
Founder, BMSET



Late Sri B. S. Narayan
Donor Trustee, BMSET

About the Institute:

BMS Institute of Technology and Management was established in the year 2002 under the auspices of BMS Educational trust with the vision of establishing a premier technical institute on par with international standards, situated on Doddaballapura road in a serene and spacious campus covering about 21 acres. It is recognized by the AICTE, Government of India and is affiliated to the Visvesvaraya Technological University (VTU), Belagavi, Karnataka, India.

BMSIT&M offers eight UG, three PG programmes and Ph.D/M.Sc (Engg) in all disciplines. BMSIT&M is one of the member institutions under Melton Foundation. Melton Foundation promotes cross-cultural exchange programs among five nations namely- India, USA, Germany, China, and Chile.

Vision of the Institute

To emerge as one of the finest technical institutions of higher learning to develop engineering professionals who are technically competent, ethical and environment friendly for betterment of society.

Mission of the Institute

Accomplish stimulating learning environment through high quality academic instruction, innovation and industry-institute interface.

About ETE Department:

The Department of Electronics & Telecommunication (ETE) Engineering is imparting quality education in the field of Electronics & Telecommunication Engineering and its allied fields. Catering to the requirements of the dynamically changing and highly competitive global environment of the present era, the department has very strong student support system in place to nurture and develop them with all round personalities through Project Based Learning (PBL), Skill based trainings by industry involvement, Proficiency courses, Open Courses, Industrial Visits, Expert Talks, Mentoring by Industry experts and strong Alumni network across the globe. The department also practices Outcome Based Education (OBE) which is the need of the present day. Department is also proud that it has 24 student ranks in the university with two Gold Medals to its credit and 100% Placement through campus selection.

Vision of the Department

Emerge as a premier department developing high quality Electronics and Telecommunication Engineering professionals with ethics and eco friendliness for betterment of the society.

Mission of the Department

Impart quality education in Electronics and Telecommunication Engineering by facilitating:

- Conducive learning environment and research activities
- Good communication skills, leadership qualities and ethics
- Strong Industry-Institute interaction

About Intel:



Shapes the future of Technology

INTEL create world-changing technology that improves the life of every person on the planet. and

People at INTEL are inspired to:

- Drive innovation that makes the world safer, builds healthy and vibrant communities, and increases productivity.
- Harness their reach around the globe to better society, business, and the planet.
- Push themselves and their industry peers to be more responsible, inclusive, and sustainable.

They have big ambitions, and a growing sense of urgency to work with others and address world challenges no one can tackle alone.

Intel has always been at the forefront of developing exiting new technology for business and consumers including emerging technologies, memory and storage, data center servers, security and graphics.

At Its heart

ENGINEERING

is about using science to find

CREATIVE

practicle solutions.

It is a noble profession

Importance of the Course:

- VLSI prototyping and many embedded industrial applications use FPGA extensively for hardware validation and implementation
- FPGA provide low cost, low turnaround time and re-usability for implementation of wide range of applications-includes Artificial Intelligence, Deep Learning, Image and video processing, Automotive applications to name a few.



Learning Outcomes:

Participants will:

- ➡ Be trained on Quartus Tool flow.
- ➡ Get exposure on Timing Analysis.
- ➡ Learn about the concept of prototyping and SoC Design on Intel Boards.
- ➡ Learn about testing and validation of Circuits implemented on hardware.



CHIEF PATRONS

Dr. B. S. Ragini Narayan

Educationist, Donor Trustee and Member Secretary,
BMSET & Chairperson, BMSET

Dr. P. Dayananda Pai

Chairman, BMSCE & Life Trustee, BMSET
Century Group Chairman, BOG, BMSCE.

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Vice-Principal, BMSIT&M

CONVENER

Dr. Raju Hajare

Head, Dept. of ETE

SDP COORDINATORS

Mr. H N Prakash Kumar 9902884437

Mrs. Geetha N 9731128552

ORGANIZING COMMITTEE

Mr. Srinivas Murthy B 9880293916

Mr. Balaji Singh B T 8618462857

Mr. Chalapathy M N 9964502716

Mr. Arun Kumar R N 9620521860

Mrs. Myna S 9663994176

**Registration confirmation is on first
come first serve basis,
Seats limited to 50.**

Who Can Participate:

Technical Staffs of Engineering/Diploma/ITI colleges
across Karnataka basically from Electrical / Computer
Science Background.

Branches: ETE/ECE/EEE/CSE/ISE/AI&ML/Etc.

**Registration Fees: ₹ 1,000/- only
(Inclusive of course material & hospitality)**

**Payments to be made through
online to the following account:**

Account Details : HoD ETE
Account No. : 21096753069
IFSC Code : IDIB000A682
Name of the Bank : Indian Bank
Branch : BMSIT&M Campus, Avalahalli

Last Date for Registration: 10.08.2022

Note to Interested Candidates:

This is an Unique opportunity for the Technical
staffs of Electrical and Computer Science
background

- To acquire knowledge and skill sets in the field of latest FPGA Technology
- To improve your Technical competency by using Industry standard FPGA tools and hardware
- To stay relevant and disseminate the acquired knowledge to your student community
- To enhance career growth in core domain
- All Participants will be provided with independent workstation during SDP

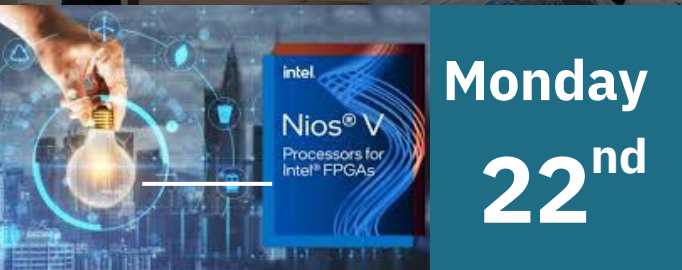


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Boarding Facility will be provided to the outstation candidates
based on advance booking and availability of rooms.
Payment to be made in advance
Contact : 9741590336 (Hostel Authority)

Resource Person

Mr. Padmanaban Kalyanaraman
Software Enabling and Optimization Engineer - CEG - Intel PSG
Bengaluru, Karnataka, India



Monday
22nd

Time:9:30 AM to 1:00 PM

Inauguration & Introduction to Intel FPGAs and Quartus Tool Flow

Time:1:30 PM to 3:30 PM.

FPGA design and implementation - Virtual labs with remote console- Hands on Lab



Tuesday
23rd

Time:9:30 AM to 1:00 PM

Introduction to Timing Analysis - Applying Timing Constraints

Time:1:30 PM to 3:30 PM

Timing Exceptions - False Paths and Multicycle Paths - Achieving timing closure – Hands on

Day wise Schedule

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Wednesday
24th

Time:9:30 AM to 1:00 PM

Introduction to Intel SoC FPGAs - IP design and Platform designer

Time:1:30 PM to 3:30 PM.

SoC Design Flow- Basic SoC lab demo and Hands on

ALTERA

Cyclone[®]
FPGA • SoC

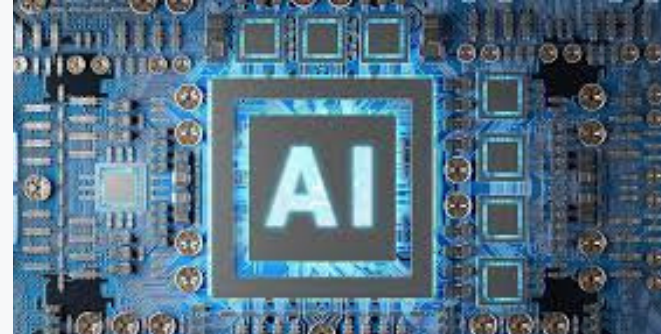
Thursday
25th

Time:9:30 AM to 1:00 PM

Embedded System design using Cyclone V and ARM

Time:1:30 PM to 3:30 PM.

SoC EDS design flow and hands on lab



Friday
26th

Time:9:30 AM to 1:00 PM

Introduction to FPGA Memory Internal and External with hands on lab

Time:1:30 PM to 3:30 PM.

Valedictory function



**Venue: Computer Laboratory, South Wing,
4th Floor, Academic Block,
BMS Institute of Technology and Management
Doddaballapur Main Road,
Avalahalli, Yelahanka,
Bengaluru - 560064.**

**Admission Queries : 080 - 68730429
Fee Queries : 080 - 68730429
Hostel Queries : 9739947120 / 7483394536 / 9741590336
Hostel Fee : 8792347320
Others : 080 - 29521171 / 080 - 68730444
Email : principal@bmsit.in**