

**TEQIP Sponsored 5-day Short Term Course on Recent Advances in Computer Architecture,
May 30 - June 3, 2016., IIT Guwahati
Venue- Hall #2, Conference Center**

Time Slot	Event/ Topic	Resource Person(s)
Day-1 (30.05.2016, Monday)		
9.00-10:00	Registration	
10:00-10:45	Inauguration Session	Prof. Gautam Biswas, Director, IITG Prof. Diganta Goswami, Head, CSE Prof. Sunil Khijwania, Head-CET&TEQIP Dr. Pinaki Mitra, Dept Coordinator, TEQIP
10:45-11:15	Session 1A: Pedagogy Session	Prof. Sukumar Nandi, IIT Guwahati
	How to teach computer architecture ?	
11:15-11:30	Tea Break	
11:30-1:00	Session 1B: Lecture Session	Dr. John Jose, IIT Guwahati
	Introduction to Instruction Pipeline	
1:00-2:00	Lunch	
2:00-3:15	Session 1C: Lecture Session	Dr. John Jose, IIT Guwahati
	Architecture for Superscalar processors	
3:15- 3:30	Tea Break	
3:30- 5:00	Session 1D: Hands on Session	Dr. John Jose, Mr. Abhijit Das, IIT Guwahati
	Introduction to EDUMIPS simulator	
Day-2 (31.05.2016, Tuesday)		
9:00-10:30	Session 2A: Lecture Session	Prof. Hemangee K. Kapoor, IIT Guwahati
	Introduction to Cache Memory Concepts	
10:30-11:00	Tea Break	
11:00-12:30	Session 2B: Lecture Session	Prof. Hemangee K. Kapoor, IIT Guwahati
	Advances in Multicore Cache Architectures	
12:30-1:30	Lunch	
1:30-3:00	Session 2C: Hands on Session	Mr. Shounak Chakraborty, Mr. Sukarn Agarwal, IIT Guwahati
	Introduction to Multi2sim simulator	
3:00-3:30	Tea Break	
3:30- 5:00	Session 2D: Hands on Session	Mr. Shounak Chakraborty, Mr. Sukarn Agarwal, IIT Guwahati
	Introduction to CACTI simulator	
Day-3 (01.06.2016, Wednesday)		
9:00-10:30	Session 3A: Lecture Session	Dr. John Jose, IIT Guwahati
	Introduction to Network on Chip (NoC)	

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10:30-11:00	Tea Break	
11:00-12:30	Session 3B: Lecture Session	Dr. John Jose, IIT Guwahati
	Role of NoC in multicore architectures	
12:30-1:30	Lunch	
1:30-3:00	Session 3C: Hands on Session	Dr. John Jose, Ms. Dipika Deb, IIT Guwahati
	Introduction to Booksim simulator	
3:00-3:30	Tea Break	
3:30- 5:00	Session 3D: Hands on Session	Dr. John Jose, Ms. Dipika Deb, IIT Guwahati
	Introduction to Orion simulator	
Day-4 (02.06.2016, Thursday)		
9:00-10:30	Session 4A: Lecture Session	Dr. Aryabarta Sahu, IIT Guwahati
	Introduction to Multicore Designs and GPUs	
10:30-11:00	Tea Break	
11:00-12:30	Session 4B: Lecture Session	Dr. Aryabarta Sahu, IIT Guwahati
	GPU Programming models	
12:30-1:30	Lunch	
1:30-3:00	Session 4C: Hands on Session	Dr. T.V. Kalyan, IBM Bengaluru
	Memory and Memory Controller - Basics	
3:00-3:30	Tea Break	
3:30- 5:00	Session 4D: Hands on Session	Dr. T.V. Kalyan, IBM Bengaluru
	Advanced Concepts in Memory Controllers	
Day-5 (03.06.2016, Friday)		
9:00-10:30	Session 5A: Lecture Session	Prof. Madhu Mutyam, IIT Madras
	Optimizations at Cache-NoC-DRAM level	
10:30-11:00	Tea Break	
11:00-12:30	Session 5B: Lecture Session	Prof. Madhu Mutyam, IIT Madras
	Multicore architecture research- roadmap ahead	
12:30-2:00	Lunch	
2:00 -3:00	Session 5C: Validictory	Dr. Pinaki Mitra, Prof. Hemangee Kapoor, Dr. John Jose, Course Coordinators - RACA 2016
	Experience sharing by participants	
	Validictory Function	
3:00-3:30	High Tea	