

EMBEDDED SYSTEM DESIGN

Year:2019

This Embedded Systems Design webinar was organized on the year of 2019-20, By Centurion University of Technology and Management.

Embedded Systems Design



Year : 2019 -20

Centurion University of Technology and Management



Pre-requisites: Nil
 Course Type : Audit (Workshop)
 Duration : 30 Hours

Course Objectives:

- Develop skilled workforce with the knowledge on latest technologies to meet the need of Embedded Industry.
- Make the student industry-ready with hands-on experience in the various Real-Time Embedded Systems.

Learning Outcomes:

- Distinguish between the general computing system and Embedded System.
- Identify and develop various product-based Embedded Systems.
- Able to configure and build a customized Linux Kernel.
- Ability to set up and use Cross Development platform.
- Execute on the knowledge gained on the Embedded Systems to become an entrepreneur.

Module	Contents	Duration
Module1	<ul style="list-style-type: none"> • Introduction to Embedded System • Embedded System Development Life Cycle • Introduction to ARM • AMBA & AHB • Features of ARM 7, ARM 9, ARM 11, ARM Cortex • Datasheet analysis • GPIO programming- LED, Seven Segment Display, LCD, Matrix keypad, Actuators (Relay, Motors, and valves) 	10 hours
Module2	<ul style="list-style-type: none"> • Real-Time OS • Types of RTOS • GPOS vs RTOS • Scheduling Algorithms & its API • InterTask Communication & its API 	10 hours
Module3	<ul style="list-style-type: none"> • Embedded Linux Overview • Linux File System • Types of Kernel • Shell Commands • Shell Scripting 	10 hours
TOTAL		30 hours

Anita Patra



Dr. Anita Patra, Registrar, CUTM

[Signature]

Convener





REPORT ON EMBEDDED SYSTEMS DESIGN

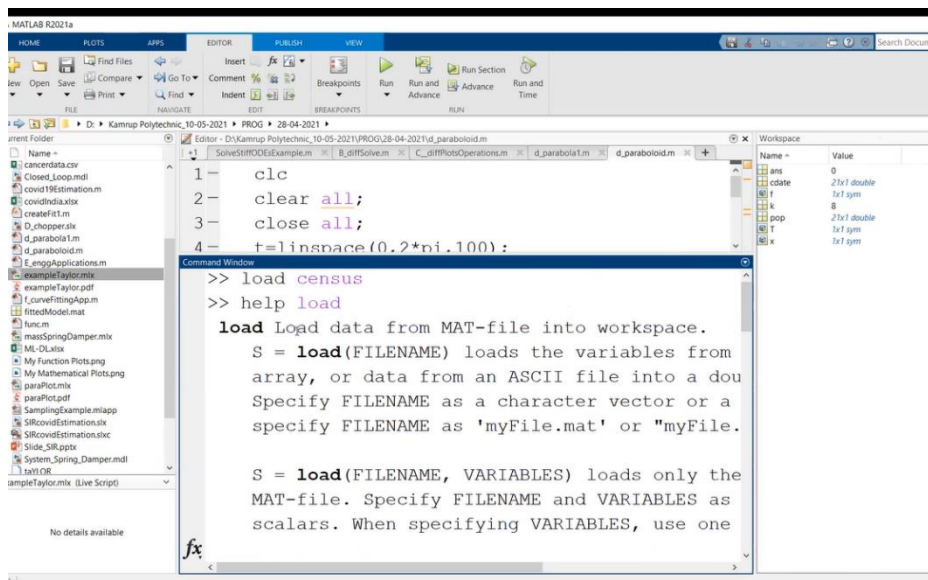
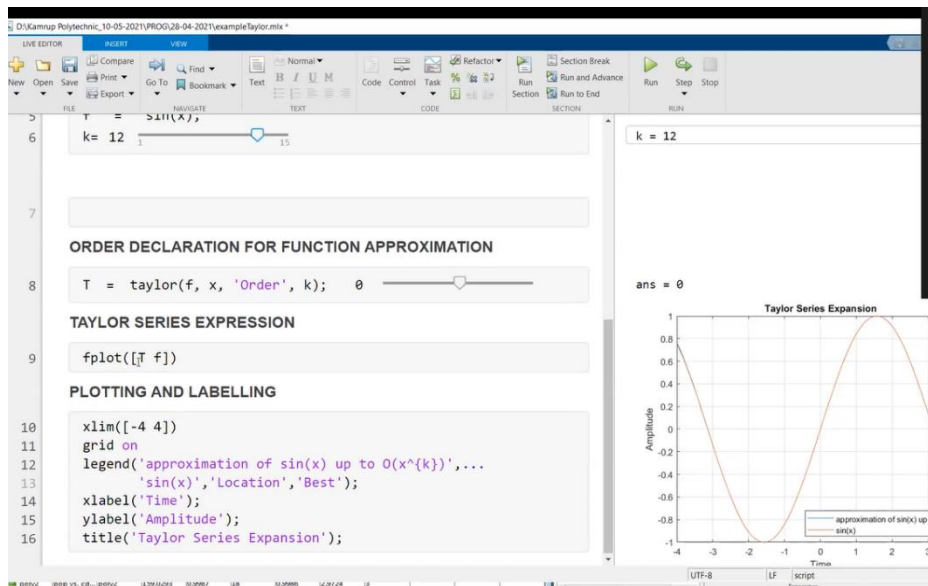
Total number of participants: 40

Academic year: 2018-19

Date: 17.07.2019

The programme intended to enhance skilled workforce with the knowledge on the latest technologies to meet the need of Embedded Industry. It also ensured that the students were made industry-ready with hands-on experience in the various Real-Time Embedded Systems.

An embedded system is a computer system with a dedicated function within a larger mechanical or electrical system, often with real-time computing constraints. It is embedded as part of a complete device often including hardware and mechanical parts. Embedded systems control many devices in common use today. Ninety-eight percent of all microprocessors are manufactured as components of embedded systems.



Demonstration on Real-Time Embedded System on 17.07.2019

The primary focus of the programme was to distinguish between the general computing system and Embedded System. Furthermore, it was highlighted to identify and develop various product-based Embedded Systems.

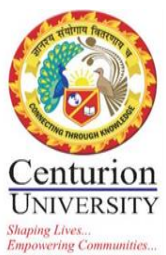
The participants also know properties of typical embedded computers when compared with general purpose counterparts are low power consumption, small size, rugged operating ranges, and low per-unit cost. The participants were able to configure and build a customized Linux

Kernel and set up and use Cross Development platform. The participants were also able to execute on the knowledge gained on the Embedded Systems to become an entrepreneur.

Anita Patra 

Dr. Anita Patra, Registrar, CUTM


Convenor 



List of Participants

Name of Event: EMBEDDED SYSTEM DESIGN

Organized by: Centurion University of Technology and Management

Date: 17 July 2019

Event Description:

This Embedded Systems Design webinar was organized in the year of 2018-19, By Centurion University of Technology and Management.

List of Participants:

S.No.	Name	Reg. No.	Presence/Absent
1	MAMIDI CHANDRIKA	180101120044	Present
2	VADI ADITYA	180101120048	Present
3	SAIPRABHA SWAIN	180101120050	Present
4	D.SHILPA	180101120051	Present
5	SRIYA RAUTO	180101120052	Present
6	ASHISH	180101120056	Present
7	TAPAN KUMAR PRUSTI	180101120058	Present
8	GORLE HARISH	180101120059	Present
9	RASHMITA PANIGRAHI	180101180054	Present
10	J.NILAKANTESHWAR RAO DORA	180101120001	Present
11	BAISHNABI RANI GANTAYET	180101120002	Absent
12	ADITYA BEBORTA	180101120003	Present
13	GORU SHIVA	180101120004	Present
14	SOMBIT KUMAR MISHRA	180101120005	Present
15	G.SIVA PRASAD	180101120006	Present
16	BISHNUPRIYA MALLIK	180101120007	Present
17	VYSYARAJU SUPRIYA	180101120008	Present
18	KILLAMSETTY SUPRIYA	180101120009	Present
19	RATTI RACHANA	180101120010	Present
20	DEBASISH RATH	180101120011	Present
21	KIRAN KUMARI DAS	180101120012	Present
22	KETHATI SRIRAM REDDY	180101120013	Present
23	L.KIRAN KUMAR	180101120014	Present
24	ANSHIDEEPA PATRA	180101120015	Present
25	AMPOLU JAI CHANDU	180101120016	Present
26	CHALLA PRASANTH	180101120017	Absent
27	DIPRIYAM KUMAR BHUYAN	180101120018	Present

28	ROKKAM DINESH KUMAR	180101120019	Present
29	BODALA JYOTISUBRAMANYUM	180101120020	Present
30	SOUMYA DARSAN PATTNAIK	180101120021	Present
31	VOOMI SANDEEP	180101120022	Present
32	NARAMSETTY MANI KUMAR	180101120023	Present
33	V NETHAJI	180101120024	Present
34	PEDDINTI MANIDEEP	180101120025	Absent
35	CHOUDHARI MANASA	180101120026	Present
36	BANDARU HARIKA	180101120027	Present
37	ALYANA VANDANA	180101120028	Present
38	SINDIRI KARTHIK	180101120029	Present
39	GEDALA NIKHIL	180101120030	Present
40	PONDARA MURALI	180101120031	Present

Anita Patra



Dr. Anita Patra, Registrar, CUTM

H. S. S.

Convenor

