

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**16.11.2018**

**REPORT ON**

**IBM TRAINING COURSE – SOFTWARE FOUNDATION PROGRAMMING USING C**

The Department of Computer Science and Engineering is collaborated with IBM Career Education to offer industry designed courses for B.Tech Computer Science and Engineering students as a specialization in AI & IOT. During the first semester, basic programming concepts is designed by IBM and handled by the IBM trainer in the institution campus.

**Resource Person : Mr.Srikrishna, IBM Trainer, Hyderabad**

Audited by Institution Faculty: Ms.Subhashini.S , Assistant Professor /CSE

& IBM CE - CSE Joint programme coordinator

Students Batch : 2018 – 2022  
Semester : 01  
Class : B.Tech CSE 'A'  
No. of Students : 51  
Duration : 45 hours

The report discusses about the following aspects with respect to the course

- 1. Course Syllabus**
- 2. Schedule of classes**
- 3. Communications with IBM CE**
- 4. Students list**

## 1. Course Syllabus

<b>CSC 1121</b>	<b>SOFTWARE FOUNDATION PROGRAMMING USING C</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
		<b>1</b>	<b>0</b>	<b>2</b>	<b>2</b>

### OBJECTIVES :

- To teach the audience relating to console based application development.
- To provide conceptual and foundational knowledge of the Fundamentals of technologies in the context of software and programming.
- To focus on history and the current topics of IT Industry including various components and practices followed with major focus on Software
- To give training on C Concepts.
- To introduce background of LINUX environment.
- To learn the features of PHP.

### **MODULE I INTRODUCTION TO C PROGRAMMING 10**

Brief History of Computing Art and Science of Programming Introduction to C Programming -Background of C, Getting Started with C, Constructs, Loops & Arrays, Functions, Pointers, User Defined Types, Binary I/O With Structures, Appendix, Reference Tables.

### **MODULE II INTRODUCTION TO OPEN STANDARDS ,LINUX & PHP 05**

Open Standard: Open Standards Model, Industries needing standards, The Impact of Standards, Open Source Software, Open Source, Open Source Technology, the OPEN Proposition.

Linux: Background of Linux, Why is Linux so popular, what can you do with Linux, Linux Distributions, Linux Technology Center, Future of Linux. PHP: PHP – Key Driver of LAMP Stack, Getting Started with PHP, Unified ODBC.

PHP Data Objects, PHP Deployment Platform, What is Zend Core, Features and Benefits, Zend and IBM, What is Ruby, What is Rails.

**L – 15;P-30; TOTAL HOURS - 45**

### LIST OF EXPERIMENTS:

Session 1: Basics - simple example programs

Session 2: Data Types and Constants; Variables, Identifier and Declarations; Operators and Expressions

Session 3: Arrays, More about Declarations (Incl. Initialization), Functions

Session 4: Assignment, Increment and Decrement Operators; Character I/O; Strings

Session 5: C Preprocessor

Session 6: Pointers, Strings

Session 7: Array/Pointer Equivalence, Memory Allocation, More about Strings

**REFERENCES:**

1. Paul J. Deitel, Deitel & Associates, “C How to Program”, 8<sup>th</sup> Edition, Pearson, Education, ISBN No: 0134227026, 2015.
2. Gary Mitnick, ”Linux: Linux Terminal Including Basic Functionalities and CLI”, CreateSpace Independent Publishing Platform, ISBN No : 1539940454,2016.
3. David Sklar,” Learning PHP: A Gentle introduction to the Web most popular language”, O’Reilly Publications, ISBN No: 1491933585,2016.
4. IBM Course ware

**OUTCOMES :**

Students who complete this course will be able to

- Explain conceptual and practical knowledge of the fundamentals of technologies in the context of building enterprise web based application.
- Sow a seed for a conceptual understanding of software and computing practices of current generation.
- Develop simple real time applications using the programming constructs and algorithms.
- Provide hands on experience with open source technologies.
- Write programs on the current problem scenario and make use of latest technology to solve the problem.
- Describe the basics of Linux and PHP concepts.

**2. Schedule of classes**

**TIME TABLE**

	1	2	3	4	5	6	7		
	9-9.50	9.50-10.40		11-11.50	11.50-12.40		1.40-2.30	2.30-3.20	3.20-4.10
MON				SEM1					
TUE									
WED								SEM1	
THUR				SEM1					
FRI								SEM1	

	START DATE	END DATE
<b>FIRST SLOT</b>	2-Aug 2018	17-Aug 2018
<b>SECOND SLOT</b>	17-Sep 2018	5-Oct 2018

### 3. Communication with IBM CE

Tentative calendar - Sem3 & Sem 1 course delivery @ Crescent >

Subashini S <subashini@crescent.education>  
 to Sheetal, Naganandini, Pramod, hodcse

Jul 26, 2016, 11:11 PM ☆ ↶ ⋮

Dear Madam,

A tentative calendar is prepared with the help of availability of resources, comfortableness of students, timetable followed for the regular classes, etc. To overcome the difficulties faced by the students and trainers, this schedule has been made. The feedback and their request was given by the Sem-3 students as follows

S.No	Difficulties faced by students	Request by the students
1	Different trainers – 2 slots – for the same course – I & II semesters	Same trainer on various slots for the course. Special request : Mr.Rohit Mittal should come back as trainer. Alternative – similar trainer
2	Trainers were rushed up to complete the topics	Trainers should handle the course based on the understanding of the delivery with the students.
3	No trainer is available in the college campus to clear the doubts	Should not be long gap between the slots to lag the continuity of the course.

On considering the above points, a tentative schedule with timings and preferable slots can be checked in the attached document.

S.no	Slot	Start date	End date	No. of days
1	I	2-Aug (if possible)/ 6-Aug (preferred atleast)	17-Aug / 21-Aug (may be extended)	16
2	II	17-Sep	5-Oct	19

The dates and hours can be extended based on the students convenience and the trainer availability.

These two slots for Sem3 -java & Sem - C courses. In between these two slots ,may plan for Industry sessions.

Let me know how many days have been planned the availability of trainer in the college campus. Also, how long it takes for Industry sessions. Based on this, I could make the changes in the schedule if required.

Note: In Excel sheet, Schedule should not be made during the assessment week. Yellow color - assessment. Long gaps of holidays and assessments leads break for the course. If not completed, may plan for slot 3 or the date may be extended as feasible.

Kindly let me know the schedule and any changes required.

Thank You

With Regards,  
 Subhashini S  
 Assistant Professor /CSE  
 B.S Abdur Rahman Crescent Institute of Science and Technology,  
 Vandalur, Chennai

Figure 1: Confirmation of schedule mail to IBM

#### 4. Students list

S.No.	RRN	Name
1	180071601001	ABIRAMI. G
2	180071601002	ADELINE JANE. J
3	180071601003	ADHIL ARIF KHAN
4	180071601004	ADITHYA. M
5	180071601005	AHMED SAAD MOHAMMED
6	180071601006	AMEEN HARIS CHENGALAN NALAGATH
7	180071601007	ASHRAF KHAN. A
8	180071601008	BASITH. H
9	180071601009	CHANDRASEKARAN. SR
10	180071601010	DHAMEEM. B
11	180071601011	DHARSHIKA . P.A
12	180071601012	DINESH RAM. D
13	180071601013	HARISH. R
14	180071601014	INAMUL HASSAN
15	180071601015	KEVIN MATHEW MOHALIL THAKEDEL
16	180071601016	MADHUMITHAA. S.S
17	180071601017	MOHAMED AKIL ASFER. M
18	180071601018	MOHAMED ARSH. K
19	180071601019	MOHAMED HARIS. K
20	180071601020	MOHAMED SHAHIL. S
21	180071601021	MOHAMMAD ABDUL NADEEM BAIG
22	180071601022	MOHAMMED MANAAZ. S
23	180071601023	MOHAMMED SUHAIL. A
24	180071601024	MONICA M
25	180071601025	MUHAMMAD UMAR. M
26	180071601026	MUTHUKUMARAN
27	180071601027	NASIRA ALMAS. M
28	180071601028	NAVIN HAASAN. R
29	180071601030	PHILIP BENJAMIN
30	180071601031	RANJITH. N
31	180071601032	ROHITH. M

32	180071601033	SAI NVEDHANA. R
33	180071601034	SANJAY. T
34	180071601035	SHABANA M ILIYAS
35	180071601036	SHAMAM HAMAD. K
36	180071601037	SHAZIA. D.B
37	180071601038	SOHAIL ANWAR
38	180071601039	SRI RAM. S
39	180071601040	SUHAINA. J
40	180071601041	SUJITHA. J
41	180071601042	SUMAIYATHUN MUHSHINA. V.M
42	180071601043	SURIYAKUMAR.B
43	180071601044	SYED ABDALLAH ALBEEZ
44	180071601045	SYED ASHFAK AHMED. N
45	180071601046	SYED AZMATHULLAH
46	180071601047	TASLIMA PARVEEN. S.Z
47	180071601048	THARUN. M.K
48	180071601049	VIMALESH RAJA KARUPPIAH RAMCHANDRAN
49	180071601050	VISHAL. S.R
50	180071601051	YUGENDHAR. J
51	180071601175	VISHWANATH. K.K.



**SUBHASHINI.S**

**(IBM CE – CSE Joint Programme coordinator)**