Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)
NAAC
BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
No.173, Agharam Road, Selaiyur, Chennai , T.N - 600 073.

Ref: BIHER/BIST/Civil//Spl/2021 **Date: 15/06/2021**

CIRCULAR

Many a times, the defined skill sets that are being imparted to students today with Programme Specific Objectives in educational institutions become redundant sooner than later due to rapid technological advancements. It is important for higher education institutions to supplement the curriculum to make students better prepared to meet industry demands as well as develop their own interests and aptitudes.

Hence a Value Added Course is offered by Department of School of Civil and Infrastructure Engineering, Bharath Institute of Higher Education & Research. The course offered is **Introduction to Ruby** with the duration of 30 hours (Two hour per day) and commences from **30.6.21** To **28.7.21 (online).**

Eligibility: Course is open for UG Students for Department School of Civil and Infrastructure Engineering.

Registration:

The registration form which is available in the university website should be duly filled by the participants and to be submitted to the Coordinator at least 5 days before the commencement of course.

Contact:

Mr.S.Rajesh
Assistant Professor / School of Civil and Infrastructure Engineering.,
Course Coordinator
Bharath Institute of Higher Education & Research.
Email id: rajeshskr062gmail.com

HOD
Head of the Dept.
(Civil Engineering)
Bharath Institute of Higher Education & Research,
Selaiyur, Chennai - 600 073.

Value Added Course: Introduction to Ruby

NAME LIST:

S.NO	REG NO	NAME OF THE CANDIDATE
1	U15CE001	AADARSH KUMAR BHARDWAJ S
2	U15CE003	ADITYA KUMAR RAI
3	U15CE005	ANUJ YADAV
4	U15CE006	ARAVINDAN D
5	U15CE008	ARUN YOMSO
6	U15CE010	BADUGU MANI BABU .
7	U15CE011	BAJOPSKHEMLANG RYNTATHIANG
8	U15CE012	BAKKANOLLA MOHAN REDDY .
9	U15CE013	BELLAMKONDA LEELA MOHAN .
10	U15CE014	BOYA Naresh NARESH
11	U15CE015	BUNGCHA MOIRANGTHEM
12	U15CE017	DABBADI ABHINAY KUMAR .
13	U15CE018	DEIMONMITRE DKHAR
14	U15CE020	DHANUSH KUMAR P
15	U15CE021	DHINAKARAN R
16	U15CE022	DHINESH M
17	U15CE023	DIPENDRA KUMAR YADAV
18	U15CE024	EDEGABODDU NARASIMHA RAVITHEJA .
19	U15CE025	GADHIRAJU NARENDRA VARMA .
20	U15CE026	GANESH PERUMAL V
21	U15CE028	GARAPATI LALITHKISHOR
22	U15CE031	GUDDETTI KEERTHANA
23	U15CE032	HARIS REYAZ
24	U15CE034	IAISHAH SUCHIANG
25	U15CE038	JAYAPRABAAKAR V
26	U15CE039	JAYASOORYA V
27	U15CE040	JIJOWILSON .
28	U15CE041	KAMALESH KUMAR A
29	U15CE042	KANGARI RANJEETH REDDY .
30	U15CE043	KAPOOR M
31	U15CE044	Kavitha T T
32	U15CE047	KSHETRIMAYUM WANGLEN SINGH .
33	U15CE050	MACHIRAJU SURESH
34	U15CE051	MANIKANDAN P
35	U15CE054	MD SHAHID IQUBAL .
36	U15CE055	Mekapothu Yeswanth Reddy
37	U15CE056	MISHRA BINIT PARMANAND .
38	U15CE057	MISHRA SHIVAM RAVINDRA .
39	U15CE058	MOHAMED ARSHAD ALI A K
40	U15CE060	MOHAMMAD IRFAN
41	U15CE061	MOHAMMAD MUJEEB UR RAHMAN

42	U15CE062	MOODIFIELD LYNGDOH
43	U15CE063	MORAM VENKATA SAI ADITHYA TEJA
44	U15CE064	MUDDADA RAVITEJA

Value Added Course: Introduction to Ruby

Content of Syllabus

S.No.	Syllabus Details	No. of Lecture Hours	Date	Time	Lecture Name
1.	Intro to ruby program	2 hrs	30.6.21	4 Pm To 6 pm	Ms.S. Thendral
2.	Comments And Errors	2 hrs	2.7.21	4 Pm To 6 pm	Ms.S. Thendral
3.	Math Operators	2 hrs	5.7.21	4 Pm To 6 pm	Ms.S. Thendral
4.	Floats And Integers	2 hrs	6.7.21	4 Pm To 6 pm	Ms.S. Thendral
5.	Comparison Operators	2 hrs	7.7.21	4 Pm To 6 pm	Ms.S. Thendral
6.	Variables	2 hrs	8.7.21	4 Pm To 6 pm	Ms.S. Thendral
7.	Assignment Operators	2 hrs	11.7.21	4 Pm To 6 pm	Ms.S. Thendral
8.	Getting User Input With Gets	2 hrs	12.7.21	4 Pm To 6 pm	Ms.S. Thendral
9.	Git Bash Weirdness	2 hrs	14.7.21	4 Pm To 6 pm	Ms.S. Thendral
10.	If / Then / Else / Elsif Statements	2 hrs	15.7.21	4 Pm To 6 pm	Ms.S. Thendral
11.	Multiple Conditional If / Then Statements	2 hrs	18.7.21	4 Pm To 6 pm	Ms.S. Thendral
12.	String Manipulation	2 hrs	19.7.21	4 Pm To 6 pm	Ms.S. Thendral
13.	Arrays	2 hrs	207.21	4 Pm To 6 pm	Ms.S. Thendral
14.	Array Manipulation	2 hrs	21.7.21	4 Pm To 6 pm	Ms.S. Thendral
15.	While Loops	2 hrs	22.7.21	4 Pm To 6 pm	Ms.S. Thendral
16.	Until Loops	2 hrs	25.7.21	4 Pm To 6 pm	Ms.S. Thendral
17.	For and Each Loops	2 hrs	26.7.21	4 Pm To 6 pm	Ms.S. Thendral
18.	Hash Manipulation	2 hrs	27.7.21	4 Pm To 6 pm	Ms.S. Thendral
19.	Random Number Generation	2 hrs	28.7.21	4 Pm To 6 pm	Ms.S. Thendral

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Topic: Introduction to Ruby

Type of Course: value added course

Department: School of Civil and infrastructure Engineering

Pre-Requisites: Familiar with fundamental programming concepts

Course Duration: 38 hours (30.6.2021)

Intended Audience: Civil Engineering Students

Industries Applicable To: All companies that deal with the Civil & Environmental engineering development

Coordinators: Mr. S. Rajesh

Objective:

- Setup the Ruby development environment
- Learn the fundamentals of the Ruby language
- Learn about the built-in Ruby libraries and APIs
- Learn the principals of object-oriented programming (OOP) in Ruby
- Built-in data types: Using them and inheriting from them in classes you design.
- Scheme for creating and using libraries and packages.

COURSE OUTLINE:

In programming and computer science in general, there is a concept called abstraction. Abstraction ensures that as users, we're far removed from what's happening "under the hood". A simple example will help illustrate this concept.

Think about the mobile phone you use every day to communicate with your friends and loved ones. Basically, you want to make and receive calls, send/receive text messages, check your face book/twitter and maybe take some pictures. As a user, you only care about the basic functionalities the phone makes available to communicate. Stated differently, you're dealing with an interface provided by the manufacturer of the phone.

The phone technician, on the other hand, must repair the phone and is faced with a different level of abstraction. She's well-versed in how the different components interact with the various sub-systems of the phone. Further down, the software engineer is concerned with the Operating System and deals with yet another layer of abstraction.

The above analysis is similar to what happens with computers. The user or client uses computers to listen to music, send emails, play games and more. They interact with the applications that make these tasks possible without any knowledge of the low level details. Programmers are also offered a level of abstraction by making use of a programming language like Ruby, which is written in C, which translates to Assembly language, which translates to machine language to translate 0s and 1s into something the computer understands. That means, every programming language is based on other lower level layers of code that make it easy to use. Another level of abstraction is how Ruby programmers use the Ruby programming language to design and build higher level languages called Domain Specific Languages or DSL's like Rails, We do not necessarily need to know how these DSL's are implemented, but we know they exist and know how to use them.

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A NAAC
GRADE
NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY

CERTIFICATE OF PARTICIPATION

This is to Certify that Anuj Yadav, from Bharath Institute of Higher Education and Research, has participated in value added course on **'Introduction to Ruby'** presented by Mr.S.Rajesh, **Assisstant Professor,** Organized by School of Civil & Infrastructre Engineering, BIHER from **30.6.21** To **28.7.21.**

Coordinator

HOD

VALUE ADDED COURSE

Feedback Form

Event Name: INTRODUTION TO RUBY

Event Venue: Date: 30/6/2021

Name of parti cipant: ANUJ YADAV

CONTENT

Was the content interesting?	Yes ✓	No
Was the content understandable?	Yes ✓	No
Was there clarity in the content?	Yes ✓	No

STRUCTURE

(Rate from 1 to 5 where 1 being the least)

How was the focus of the talk good?	1	2	3	4	5 ✓
How far you found the lecture useful?	1	2	3	4	5 ✓
How far did the lecturer meet your expectations?	1	2	3	4	5 ✓

What struck you about this topic? _____

PRESENTATION

(Rate from 1 to 5 where 1 being the least)

How far the lecturer managed to capture your attention?	1	2	3	4	5 ✓
How did you find the lecturer vocabulary?	1	2	3	4	5 ✓
How far audience participation & interaction encouraged?	1	2	3	4	5 ✓
How far the lecturer appeared enthusiastic about the subject?	1	2	3	4	5 ✓

OVERALL

Where you satisfied with the lecture?	Yes ✓	No	
Was the lecturer able to answer your questions?	Yes ✓	No	
What is your overall impression about the lecture?	Good ✓	Average	Ok

What suggestions do you have to improve the lecturers approach? More of Practical Sessions

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