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Number of Add on / Certificate programs offered during the last five years

Year 1 (2021-22)							
Sl No	Add on / Certificate programs offered	Year of offering	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year		
1	Teamwork skills: communicating effectively in in groups, Introduction to Phyton, Control Structure in C- Getting Started, Control Structure in C- Looping and Unconditional Control Structures, Graph Data Structures, Programming Fundamentals.	2021-22	40 Hours	202	113		
2	Exploring Computers, Basics of Business Communication, Communicating to Succeed, Email Writing Skills, Understanding Body Language, Speak Up, Understanding social styles, Learn and Master C Programming For Absolute Beginners.	2021-22	30 Hours	210	150		
3	Hackfest	2021-22	100 Hours	16	16		
4	VLSI	2021-22	200 Hours	24	24		

		l		1	
5	Workshop on Advanced applications of surveying using Total station	2021-22	30 Hours	68	68
6	Workshop on Smart IoT System Design for Industrial Applications	2021-22	21 Hours	30	30
7	Three-day Student Development Programme on Latest IT Insights and Cloud Technologies	2021-22	21 Hours	59	59
	1	Year 2 (2020-21)	l .	
Sl No	Add on / Certificate	Year of	Duration of	Number of	Number of
Silvo	programs offered	offering	course	students enrolled in the year	Students completing the course in the year
8	Business English Communication Skills 2	2020-21	60 Hours	120	100
9	Data Structures	2020-21	60 Hours	120	100
10	Object Oriented Programming in Java	2020-21	60 Hours	120	100
11	Business English Communication Skills	2020-21	60 Hours	147	132
12	Learn English: Advanced Academic Speaking and Listening	2020-21	60 Hours	147	132
13	Introduction to Programming in C	2020-21	60 Hours	147	132
14	ERP Expert designing.	2020-21	60 Hours	22	22
15	STEP - LabView	2020-21	52 Hours	47	47
16	Arduino Lab	2020-21	60 Hours	35	35
17	Advanced surveying using total station	2020-21	30 hours	50	50
18	Concept to Product Design	2020-21	21 Hours	37	37
19	Virtual 3 - day In- House Student	2020-21	21 Hours	113	113

	Development Programme titled "Agile Project Management and Continuous Delivery with Git and Jenkins"				
			2019-20)		
SI No	Add on / Certificate programs offered	Year of offering	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
20	Web applications development using Angular 6, Hands on	2019-20	28 Hourss	63	63
		Year 4 (2018-19)		
Sl No	Add on / Certificate programs offered	Year of offering	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
		Year 5 (2017-18)	l .	
Sl No	Add on / Certificate programs offered	Year of offering	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year



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Department of Computer Science and Engineering

Vision: Preparing better Computer Professional for a Real World

1.2.2 Number of Add on / Certificate programs offered during the last five years

SN	Add on / Certificate programs offered	Year of offering	Duration of course				
	2021-222						
1	Teamwork skills: communicating effectively in in groups,	2021-22	40 Hours				
	Introduction to Phyton, Control Structure in C- Getting Started,						
	Control Structure in C- Looping and Unconditional Control Structures,						
	Graph Data Structures, Programming Fundamentals.						
	2020-2021						
1	Exploring Computers, Basics of Business Communication, Communicating	2020-21	30 Hours				
	to Succeed, Email Writing Skills, Understanding Body Language, Speak Up,						
	understanding social styles, Learn and Master C Programming for Absolute						
	Beginners.						
2	Business English Communication Skills1	2020-21	60 Hours				
3	Business English Communication Skills 2	2020-21	60 Hours				
4	Data Structures	2020-21	60 Hours				
5	Object Oriented Programming in Java	2020-21	60 Hours				
6	Business English Communication Skills	2020-21	60 Hours				
7	Learn English: Advanced Academic Speaking and Listening	2020-21	60 Hours				
8	Introduction to Programming in C	2020-21	60 Hours				
9	ERP Expert designing.	2020-21	60 Hours				

1.2.2 Number of Add on /Certificate programs offered during the last five years(10)

1.2.3 Average percentage of students enrolled in Add-on/Certificate programs as against

the total number of students during the last five years (10)

	Year1 (2020-21)							
SN	Add on / Certificate programs offered	Year of offering	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year			
1	Business English Communication Skills1	2020-21	60 Hours	120	100			
		Year	2 (2021-22	2)				
1	Teamwork skills: communicating effectively in in groups, Introduction to Phyton, Control Structure in C- Getting Started, Control Structure in C- Looping and Unconditional Control Structures, Graph Data Structures, Programming Fundamentals	2021-22	40 Hours	202	113			
2	Programming Fundamentals. Exploring Computers, Basics of Business Communication, Communicating to Succeed, Email Writing Skills, Understanding Body Language, Speak Up, Understanding social styles, Learn and Master C Programming For Absolute Beginners.	2021-22	30 Hours	210	150			
3	Business English Communication Skills 2	2020-21	60 Hours	120	100			
4	Data Structures	2020-21	60 Hours	120	100			
5	Object Oriented Programming in Java	2020-21	60 Hours	120	100			
6	Business English Communication Skills	2020-21	60 Hours	147	132			
7	Learn English: Advanced Academic Speaking and Listening	2020-21	60 Hours	147	132			
8	Introduction to Programming in C	2020-21	60 Hours	147	132			
9	ERP Expert designing.	2020-21	60 Hours	22	22			

Summary report of Add on/Certificate programs offered during the last five years

Conducted add-on programs on the below TYLskill areas.

- 1. Language–(Lx)
- 2. Aptitude– (Ax)
- 3. Core–(Px-Core Programming, Cx-Core Academic)
- 4. Experiential
- 5. Soft Skills–(Sx)

Aptitude Subjects

- 1. A1–AptitudeBasics
- 2. A2-Aptitude-2
- 3. A3-Aptitude-3

Outcome:

- 1. Develop higher order thinking capability
- 2. Develop problem solving mindset
- 3. Enhance verbal ability and language proficiency
- 4. Perform well in competitive exams

Soft Skills Subjects

- 1. S1-SoftSkills-1
- 2. S2–SoftSkills-2
- 3. S3-SoftSkills-3

Outcome:

- 1. Prepare high quality resumes
- 2. Participate in Group Discussion and Personal Interviews effectively
- 3. Attend Technical and HR interviews with confidence
- 4. Communicate effectively with Interviewers.
- 5. Show case professionalism through out the hiring process

Px Programming Subjects

- 1. P1–Basics with C
- 2. P2–PythonandDB
- 3. P2-DataStructurewith C
- 4. P2-AdvancedConcepts
- 5. P3–PythonProgramming
- 6. P3–JavaProgramming
- 7. P4-Proficiencyin Python

- 8. P4 Proficiency in Java
- 9. P5–FullStackDevelopment
- 10. P5–BigDataAnalytics
- 11. P5–CloudComputing
- 12. P5-Machine Learning with Python

Outcome:

- 1. Modularize a given problem using functionsa nd structures
- 2. Apply concepts of C programming in implementing data structures
- 3. Construct a programming solution to the given problem using C by selecting suitable data structures
- 4. Model a given problem/scenario in terms of data-structures needed and algorithms /methods useful to solve/ analyze it.
- 5. Examine Python syntax and semantics and confident enough to the use of Python control flow structures and functions.
- 6. Code, test, debug and manipulate Simple Python programs
- 7. Handle exceptions and working with files
- 8. Create solutions using object-oriented paradigm and at a structure.
- 9. Demonstrate the basic programming constructs of Java.
- 10. Implement the concepts of arrays and strings.
- 11. Demonstrate the concepts of classes.
- 12. Implement the concept of Packages, Interfaces and Exceptions using Java for developing applications for given problems.
- 13. Examine Python syntax and semantics and be confident in the use of Python control flow structures and functions.
- 14. Create, run and manipulate Python Programs using core data structures like Lists,
- 15. Interpret Object-Oriented Programming concepts in Python.
- 16. Solve problems by applying algorithm design techniques
- 17. Understand fundamentals of Big Data analytics.
- 18. Investigate frame work and Hadoop Distributed File system.
- 19. Use Machine Learning algorithms for real world big data
- 20. Understand the fundamentals of cloud computing technology.
- 21. Understand the supporting environment such as distributed computing and virtualisation.
- 22. Realize the industrial platforms as premier cloud environments.
- 23. Understand the importance of different aspects of security in cloud computing technology.
- 24. Adapt HTML and C S S syntax and semantics to build web pages.
- 25. Develop Client-Side Scripts using JavaScript
- 26. Develop Server-Side Scripts using PHP and My SQL to generate and display the contents dynamically.
- 27. Inspect Java Script platforms like NodeJS, Express, and React JS to focus on Core features.

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Department of Electronics & Communication Engineering

List of courses conducted in ECE department

SL.NO	Add on course name	year	Duration	No. of Students
1	Hackfest	2022	20 days	16
2	VLSI	2022	200 hours	24
3	C- programming	2021	16 hours	123
4	STEP- lab view	2020	52 hours	47

Hack Fest - 2022

Outcomes: After completion of course students will be able to

Outcome od Hackfest:

- 1. It generates innovative ideas in making project
- 2. It gives enough confidence in bringing new products in business
- 3. It is to build and expand communities to solve problems and to get solutions.
- 4. It helps in participating hackathon and project contest
- 5. It gives new technical skills
- 6. It helps in enhancing soft skills
- 7. Opportunity to meet industry experts.
- 8. It is to gain knowledge in new technologies

VLSI circuit and layout design

Year 2022

Outcomes: After completion of course students will be able to

- The main objective of the course is that students should be able to work in Linux environment, schematic entry in EDA tool, placement planning, analog and digital layout design, routing and physical verification checks like DRC, LVS for typical analog circuits such as Opamp, PLL, Bandgap, LDO and standard cells.
- Students will also understand fixing deep sub-micron process issues like Antenna, Latchup, EM&IR.
- 3. Course also focus on giving insights of the Analog circuit design and Simulation, IO Layout Training, Memory Layout Training as well. After completing the course, you will get opportunity to move into domains such as Analog & Mixed Signal Layout Design, Memory Layout Design, Standard Cell Layout Design, and I/O Layout Design.
- 4. To train students to build their resume which suits the requirements of the core domain
- Students should be able to get jobs in Core companies

STEP Program by VI Solution

Year 2019-20

Outcomes: After completion of course students will be able to

- Acquire and analyze single-channel and multi-channel data from NI DAQ devices and non-NI instruments
- 2. Create user interfaces with charts, graphs, and buttons
- 3. Use programming structures and data types
- 4. Debug and troubleshoot applications
- 5. Log data to file
- 6. Use best programming practices for code reuse and readability
- 7. Implement a sequencer using a state machine design pattern
- 8. utilize composite data in the form of Arrays and Clusters
- 9. Analyze signal processing algorithms in LabVIEW
- 10. Interface and control different types of hardware modules and instruments

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Department of Electronics and Instrumentation Engineering IoT center of Excellence

27/02/21

Arduino uno lab

Key note speaker: Dr. Andhe Pallavi

Resource persons: Dr. Mallikarjun H M, Dr. Madhura G

Hands on:

G N Srikanth, P Manohar, Latha P, Savitha S J, Shalini, Sneha G C, Chetan Ghatage

Department EIE has conducted Arduino uno lab series under IoT center of Excellence for 33 hours as beyond curricular content. Open-source approach is essential tools that empower and support students as they progress through filling a gap between industry and academia. This lab series event started with the key note address by Dr. Andhe Pallavi, HoD, Dept. EIE. She presented need of developing coding skills and concepts of interfacing in hardware design for real time applications of IoT.

Dr. Mallikarjun H M, Dr. Madhura G presented introductory modules, methods, interfacing experiments, IoT by using Arduino kit. Experimentation (hands on experiments) in lab was conducted in multiple sessions for individual skill set enhancement. A test with viva voce was conducted at the end of the course.

crof. & Head

f instrumentation

N.S. Institute of Technology

Subramanyapura P. O. RANGALORE - 560 061

RNS INSTITUTE OF TECHNOLOGY, BANGALORE - 560098 Department: Electrical and Electronics Engineering

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The following student workshop activities are conducted by Department of Electrical and Electronics Engineering in collaboration with M/s IndiaTech-Keys.

Dates	Title of Workshop	No. of Students Attended	No. of Days
2 nd , 3 rd and 4 th July 2022	Workshop on Smart IoT System design for Industrial Applications	30	3 Days
12 th , 13 th and 14 th November 2021	Concept to Product Design	37	3 Days
23 rd , 24 th and 25 th August 2019	Embedded System Design	52	3 Days
23 rd , 24 th and 25 th March 2018	Concept to Product	36	3 Days

HOD, EEE

INDIA TECH-KEYS WORKSHOP (2nd, 3rd and 4th July - 2022)

India Tech-Keys conducted a three day workshop for second year engineering students belonging to Electrical and Electronics Engineering on "Smart IoT System Design for Industrial Applications". The main objective was to make students understand the usage Rasberry pie microcontroller, development of mobile applications, introduction to embedded systems. Thirty students from second year participated and obtained knowledge through this workshop.



Workshop on Smart IoT System Design For Industrial Applications

Topics Covered

- * Embedded System Programming.
- * Raspberry Pi Microprocessor.
- * Raspbian OS Architecure.
- * Wireless Communication Implementation.
- * Integration of Sensors and Actuators.
- * IoT Mobile App Development.



Dates

2nd, 3rd and 4th July- 2022

Organizer Dr. S Sumathi Prof & HOD, EEE RNS Institute of Technology

Under the Guidence of Dr. M K Venkatesha Principal RNS Institute of Technology

Contact Information

Staff Co-ordinator
Dr. Sharada Prasad N
Prof, EEE Dept ,RNSIT
+91 89717 04460

Trainers

Mr.Kotresh M +91 95385 05796 Ms.Shrenika R M +91 72593 79496

Note: Laptops with Optical Mouse is preferable for workshop

INDIA TECH-KEYS WORKSHOP (12th, 13th and !4th November-2021)

India Tech-Keys conducted a three day workshop for second and third year engineering students belonging to Electrical and Electronics Engineering on "Concept to Product Design". The main objective was to make students understand the circuit buliding, PCB design and fabrication, usage of various sensors and interfacing them by writing code and obtaining the desired output. Total of thirty four students from second and third year participated



RNS Institute of technology Dept of Civil Engineering

- 1.2.2 Number of add on/certificate programs offered during the last five years.
- 1.2.3 Average percentage of students enrolled in Add-on/Certificate programs as against the total number of students during the last five years.

SI no	Number of add on/certificate programs offered	Year of offering	Duration of course	No of students enrolled	No of students attended
	h. e. e.	Year 1: 2021	-2022		0.0001000
1	Workshop on Advanced applications of surveying using Total station	2022	5 days	68	68
		Year 2: 2020	-2021		
2	Advanced surveying using total station	2021	5 days	50	50



RNS INSTITUTE OF TECHNOLOGY Department of Civil Engineering

Five-Day Workshop On Advanced Applications of Surveying Using Total Station

Five-day WORKSHOP ON ADVANCED APPLICATIONS OF SURVEYING USING TOTAL STATION was held in the department of Civil Engineering between March 21-March 26, 2022. Mr. Mr. Ayanakanti Murali babu Senior vice president E surveying softech India private limited Bengaluru inaugurated the event with a technical talk presided by hands on session for THREE DAYS. The workshop was attended by faculty members and students of V semester BE(CV). The technical talk introduced to the students the concepts of TOTAL STATION, surveying concepts of use of the equipment. Three day hands on session enabled the students to understand the working principle of total station. Students were guided to do specific survey work such as highway alignment. A total of FIVE TOTAL STATIONS were used to guide the participants (around 70 numbers) and all the participants were well acquainted of the total station concept at the end of fourth day. They were also guided to process the data using AutoCAD software. Internal Resource persons Prof.Mahadeva M, Prof.Meghan Gowda J S, Prof. Maheen R Gogeri, Prof. Dharmesh N, Prof. Arjun P, Prof. Ravi Kumar and Prof. Madhusudhana Y B were actively involved in the conduction of workshop and guiding the participants in understanding the concepts of total station. The workshop ended with Technical talk on Civil 3D for roadway design-An insight by Mr. Puneeth M S Assistant Professor in Civil Engineering, Bangalore institute of technology, Bangalore who apprised the participants of use of Civil 3D inadvanced surveying. The technology explained by the speaker made the participants to understand that the use of Civil 3D for roadway design can enable complex topographical surveys to be completed quickly.

The certificates were distributed to the participants by the speaker in the day. All the participants gave a good feedback about the conduction of the workshop.



RNS INSTITUTE OF TECHNOLOGY Department of Civil Engineering

Five-Day Workshop On Advanced Surveying Using Total Station

Five-day WORKSHOP ON ADVANCED SURVEYING USING TOTAL STATION was held in the department of Civil Engineering between March 29-April 3, 2021. Mr. Sabareshwaran S Assistant Professor (Senior), Department of Civil Engineering JNNCE, Shivamogga inaugurated the event with a technical talk presided by hands on session for THREE DAYS. The workshop was attended by faculty members and students of V semester BE(CV). The technical talk introduced to the students the concepts of TOTAL STATION, surveying concepts of use of the equipment.

Three day hands on session enabled the students to understand the working principle of total station. Students were guided to do specific survey work such as highway alignment. A total of FIVE TOTAL STATIONS were used to guide the participants (around 50 numbers) and all the participants were well acquainted of the total station concept at the end of third day. They were also guided to process the data using AutoCAD software. Internal Resource persons Prof. Dharmesh, Prof. Arjun and Prof. Ravi Kumar were actively involved in the conduction of workshop and guiding the participants in understanding the concepts of total station.

The workshop ended with Technical talk on Drone Technology by Mr. Neel Sagar Ganeshan ALFA

Drone Technology Bengaluru who apprised the participants of use of DRONE technology in
advanced surveying. The technology explained by the speaker made the participants to understand
that the use of DRONES can enable complex topographical surveys to be completed quickly.

The certificates were distributed to the participants by the speaker in the day. All the participants gave a good feedback about the conduction of the workshop.



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An Institute with a Difference

Department of Master of Computer Applications

Vision: Synergizing Computer Applications for real world

1.2.2. Number of Add on/Certificate program offered during the last five years

	CAY-2: 2019-2020	•	
SN	of Add on/Certificate program offered	Year of offering	Duration of course
1	Web applications development using Angular 6, Hands on	2019	4 days
-	CAY -1: 2020 - 2021		
2	Virtual 3 - day In-House Student Development Programme titled "Agile Project Management and Continuous Delivery with Git and Jenkins"	2020	3 days
	CAY: 2021 - 2022		
3	Three-day Student Development Programme on "Latest IT	2022	2
2700	Insights and Cloud Technologies"	2022	3 days

HoD

M/C Colufations

Principal





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Department of Master of Computer Applications

Vision: Synergizing Computer Applications for real world

1.2.2. Number of Add on/Certificate program offered during the last five years (3)

1.2.3. Average percentage of students enrolled in Add-on/Certificate programs as against the total number of students during the last five years

Name of Add on /Certificate programs offered	Year of offering	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
Web applications development using Angular 6, Hands on	2019	4 days	63	63
Virtual 3 - day In-House Student Development Programme titled "Agile Project Management and Continuous Delivery with Git and Jenkins"	2020	3 days	113	113
Three-day Student Development Programme on Latest IT Insights and Cloud Technologies	2022	3 days	59	59

Summary report of Add on /Certificate programs offered during the last five years

2020-21 and 2019-20:

Conducted add-on programs on the below TYL skill areas.

- 1. Aptitude (Ax)
- 2. Core (Px-Core Programming, Cx- Core Academic)
- 3. Soft Skills (Sx)

Aptitude Subjects

- 1. A1 Aptitude Basics
- 2. A2 Aptitude-2
- 3. A3 Aptitude-3

Outcome:

- 1. Develop higher order thinking capability
- 2. Develop problem solving mindset
- 3. Enhance verbal ability and language proficiency
- 4. Perform well in competitive exams

4. Perform well in competitive exams

Soft Skills Subjects

- 1. S1 Soft Skills-1
- 2. S2 Soft Skills-2
- 3. S3 Soft Skills-3

Outcome:

- 1. Prepare high quality resumes
- 2. Participate in Group Discussion and Personal Interviews effectively
- 3. Attend Technical and HR interviews with confidence
- 4. Communicate effectively with Interviewers.
- 5. Showcase professionalism throughout the hiring process

Px Programming Subjects

- 1. P1 Basics with C
- 2. P2 Python and DB
- 3. P2 Data Structure with C
- 4. P3 Python Programming
- 5. P3 Java Programming
- 6. P4 Proficiency in Python
- 7. P4 Proficiency in Java
- 8. P5 Full Stack Development

Outcome:

- 1. Modularize a given problem using functions and structures
- 2. Apply appropriate programming by implementing data structures
- 3. Model a given problem/scenario in terms of data-structures needed and algorithms / methods useful to solve / analyse it.
- 5. Code, test, debug and manipulate Simple Python programs
- 6. Handle exceptions and working with files
- 7. Create solutions using object-oriented paradigm and data structure.
- 8. Demonstrate the basic programming constructs of Java.
- 9. Demonstrate the concepts of classes.

HoD

Principal

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