

Autonomous Institution Affiliated to Visvesvaraya Technólogical University, Belagavi Approved by AICTE, New Delhi

RVCE/DA/

626 /2021-2022

Friday, July 8, 2022

Sub: Schedule of SKILL LABS for II Sem B.E. Students of 2021 admission.

Improving the skills of engineering students is critical for the nation's economic development. Engineering students' adequate skills can help businesses to transform themselves structurally in the ways that are necessary to adapt to the emerging technologies. The future of skilled jobs requires attention to the labour market and to the employer needs for developing newer technologies. Training policies as per NEP 2020 for the skill development are addressed in the scheduled SKILL LABS.

Schedule of SKILL LABS as follows:

Sl.No	Program	Date		- Skill Lab Title			
		Start Date	End Date	Skill Dab Little			
1	AI	25-07-2022	30-07-2022	Data Visualization Tools			
2	AS	18-07-2022	23-07-2022				
3	IM .	18-07-2022	23-07-2022	Basic Fabrication and Service			
4	ME	25-07-2022	30-07-2022	<u> </u>			
5	BT	08-08-2022	13-08-2022	Water Testing & Skill Based Lab			
6	СН	18-07-2022	23-07-2022	Basic Skills Of Engineering			
7	CV	18-07-2022	23-07-2022	Basic Skins of Engineering			
8	CS	25-07-2022	30-07-2022	IT Essentials (IT Skills For All)			
9	EC	01-08-2022	06-08-2022				
10	EE	25-07-2022	30-07-2022	Basic Hardware and Service			
11	EI	25-07-2022	30-07-2022	- Basic Hardware and Service			
12	ET	25-07-2022	30-07-2022	1			
13	IS	18-07-2022	23-07-2022	IT Essentials			

Note:

- 1. Students who have paid the special lab fee are eligible for this certification programme. The student must maintain 90 % attendance for obtaining the skill lab certificate.
- 2. The theory and lab sessions have been cancelled for the sections during their SKILL LABS as per the schedule. Other than this period, regular theory and lab sessions will be held as per the time table.

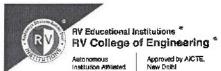
Encl: Schedule & Venue for SKILL LABS.

DEAN ACADEMICS

DEAN ACADEMICS R.V. College of Engineering Bengaluru - 560 059 PRINCIPAL R.V. College of Engineering Bengaluru - 560 059

Copy to:

- 1. Vice-Principal, for information;
- 2. Dean Student Affairs for information;
- 3. HoDs of respective departments for information and needful;
- 4. Controller of Examination for information and needful;
- 5. First Year counselors & course handling faculty, for information and needful;



RV COLLEGE OF ENGINEERING®, BENGALURU - 560 059

(Autonomous Institution Affiliated to VTU, Belagavi) **SKILL LAB SCHEDULE**

University, Belagavi

II SEMESTER BE PROGRAMS

W. E. F: 11 - 07 - 2022

S1 No	Section	Skill lab name	Venue	Week	Faculty	Program	Phone number	emaîl id
1	AI&ML	Data visualsation tools	AIML Lab-01, AIML Lab-02, Tutorial Room-01	July 25-30, 2022	Dr.Sathish Babu, Dr.Vijayalakshmi.M.N, Prof. Narasimha Swamy.S, Prof. Somesh Nandi	AI	9986551776 9986232400	vijayalakshmi@rvce.edu.in, narasimhaswamys@rvce.edu.in
2	AS		ME WORKSHOP	July 18-23, 2022	Dr. Shivaraj B W	ME	7338614265	shivrajwali@rvce.edu.in
			ME WORKSHOP	July 18-23, 2023	Dr.Vijaya Kumar M N	IM	9731932333	vijayakumar@rvce.edu.in
3	IEM			July 18-23, 2024	Nandhini B	IM	9739458879	nandinibiem@rvce.edu.in
-		Basic fabrication and service		July 18-23, 2025	Arjuna Singar	IM	9986060935	arjunsingar@rvce.edu.in
4	ME-A		ME WORKSHOP		Dr. Shivaraj B W	ME	7338614265	shivrajwali@rvce.edu.in
5	ME-B		ME WORKSHOP	July 25-30, 2022	Dr. Harisha S K	ME	9538300040	harishask@rvce.edu.in
б	BT	Water testing skill based lab	Biotechnology Lab	Aug 8-13, 2022	Dr Nagashree N Rao, Dr Ashwani Sharma & Dr Shivandappa	вт	6360962828, 9845417270, 9148399565	nagashreenrao@rvce.edu.in. ashwanisharma@rvce.edu.in, shivandappa@rvce.edu.in
7	CH		Concrete Casting Yard and Cricket Ground	July 18-23, 2022	Dr.Vidya C	CH	9620166222	vidyac@rvce.edu.in
8	CV-A	Basic skills of Engineering	Concrete Casting Yard and Cricket Ground	July 18-23, 2022	Anand Kumar B G	CV	9844755956	anandkumarbg@rvce.edu.in
9	CV-B		Concrete Casting Yard and Cricket Ground	July 18-23, 2022	Durga Prashanth L	CV	9986754276	durgaprashanthl@rvce.edu.in
10	CS-A		CSE lab 1 & lab 2	July 25-30, 2022	Prof. Badarinath K	CS	9945124747	badarinath.kb@rvce.edu.in
11	CS-B	IT essentials - IT skills for all	CSE lab 3 & lab 4	July 25-30, 2022	Dr. Vinay Hegde	CS	9449782211	vinayvhegde@rvce.edu.in
12	CS-C		CSE lab 5 & lab 6	July 25-30, 2022	Prof Pavitra H	CS	9591830273	pavithrah@rvce.edu.in
13	EC-A			Aug 1-6, 2022	Dr. Kariyappa B S	EC	8310030957	kariyappabs@rvce.edu.in
14	EC-B			Aug 1-6, 2022	Dr. Kariyappa B S	EC	8310030957	kariyappabs@rvce.edu.in
15	EC-C			Aug 1-6, 2022	Dr. Kariyappa B S	EC	8310030957	kariyappabs@rvce.edu.in
16	EE	Basic hardware and service		July 25-30, 2022	D. V Chayapathy	EE	7899638568	chayapathiv@rvce.edu.in
17	ΕĪ			July 25-30, 2022	Dr.Ramesh K B	EI	9342522399	rameshkb@rvce.edu.in
18	ET	İ		July 25-30, 2022	Dr. Premananda B S	ET	9844531730	premanandabs@rvce.edu.in
		IT essentials	ISE Seminar Hall+ ISE Labs	July 18-23, 2022	Dr.Anala MR	IS	8618687573	analamr@rvce.edu.in
19	IS				Dr.Padmashree T	IS	9632076605	padmashreet@rvce.edu.in
					Prof.Priya D	IS	9986997603	priyad@rvce.edu.in

R.V. College of Engineering Bengaluru - 560 059



IAI

Department of Artificial Intelligence and Machine Learning

RV College of Engineering®

DATA VISUALIZATION TOOLS For First Year Students

Overview:

Improving the skills of engineering students is critical for the nation's economic development. Engineering students' adequate skills can help businesses to transform themselves structurally in the ways that are necessary to adapt to the emerging technologies. The future of skilled jobs requires attention to the labour market and to the employer needs for developing newer technologies. Training policies as per NEP 2020 for the skill development are addressed in this program.



Mode of Conduction of each Module:

2 Hours Theory, 2 Hours Demo, 3 Lab Sessions of 2.5 Hours each Prepare for Careers / Employability options. Develop skills for entry-level technical support roles Prepare for Certification examination.

Module 1: Business Intelligence

Introduction to Business Intelligence, Understanding dataset, Introduction to Data Visualization.

Module 3: Power BI

Overview of Power BI, setting up the Power BI Environment, Data Sources and Visual Types, Constructing Bar, Column, and Pie, Charts, Building Line and Scatter Charts, Creating the Map-based Visualization, Creating the dashboard.

Module 4: Tableau

Overview of Tableau, Setting up the Tableau Environment, Live Data Connection, Filtering and sorting the data, Creating Basic Visualization, Creating dashboard.

Module 2: Excel

Overview of Excel features, Excel Plots, Introduction to VBA, Anatomy of Macros, Creating Personal macro-Workbook, Introduction to Visual Basic Editor.

Terms and Condition

Only students who have paid a special lab fee to the institution.

The students must maintain 90% attendance for obtaining the skill lab certificate.

Students must attend training as per scheduled time.

Acceptance

In order to accept and start the training of the program, students are required to sign in the provided space. Please remember that after signatures, the proposal will be set into action by RVCE/for any queries, it is advised to discuss with the appointed representatives before the signing and making it officially.

Coordinators:

Dr. Vijayalakshmi M N

Dept. of AIML Phone: 9986551776

E-mail: vijayalakshmi@rvce.edu.in

Prof. Narasimha Swamy S

Dept. of AIML Phone: 9986232400

E-mail: narasimhaswamys@rvce.edu.in

Student Details

Name: _____

USN: ______
Branch: _____

Phone: _____e-mail:

Signature of Student

After training, the student Careers in Data Visualization may include Data Visualization Analyst, BI Designer, Data Visualization Engineer, Business Intelligence Developer. There are about 14,000+ Data Visualization Jobs in India.



WATER TESTING AND SKILL **BASED LAB**

Organized by **Departments of BIOTECHNOLOGY**

RV College of Engineering

For First Year Students

SUMMARY

Improving the skills of engineering students is critical for nation's economic development. Engineering students' adequate skills can help businesses to transform themselves structurally in the ways that are necessary to adapt to the emerging technologies. The future of skilled jobs requires attention to the labour market and to the employer needs for developing newer technologies. Training policies as per NEP 2020 for the skill development are addressed in this program.







Biological Characterisation and assay: Escherichia coli, Coliform Bacteria, Coliform Bacteria, Staphylococcus aureus, Sulphite Reducing Anaerobes, Pseudomonas aeruginosa, Aerobic Microbial Count, Yeast & Mould, Salmonella and Shigella, Vibrio cholera

Details about water filter and its components: Types of water filters, advancements in water filters, conventional and advanced water filters, candles, cartridges, columns, types of membranes, membrane materials, structural and other allied components, radiationsources

Maintenance of filters: Types of filters, Mechanical Filters, Absorption Filters, Sequestration Filters, Ion Exchange Filters, Reverse Osmosis Filters. Durability, common problems and trouble shoots, nature of filters, columns and cartridges, filtration, softening, desalination, coagulation, flocculation, clarification, durability of filters

Tools for accessing various parameters for water testing: conductivity, odor, sediment, and turbidity, PH Meter, Conductivity Meter, Turbidity Meter, Dissolved Oxygen Meter, Flame Photo Meter, (UV Spectrophotometer and Colorimeter, portable digital meters, colorimeters, and photometers

Analysis of Physical, Organoleptic properties and toxic substances: Taste, Colour, Odour, Turbidity, Total dissolved solids. Temperature testing, pH testing, Chloride test, Salinity testing, Dissolved Oxygen Test, Turbidity test, Nitrate and Phosphate, Pesticides, Heavy metals; Arsenic, Fluorine, Cadmium, mercury, lead. Iron, Barium, and other heavy and toxic metals

Only students who have paid a special lab fee to the institution The students must maintain 90 % attendance for obtaining the skill lab certificate Students must attend training as per scheduled

Terms and Condition

Acceptance

In order to accept and start the training of the program, students are required to sign in the provided space. Please remember that after signatures, the proposal will be set into action by RVCE/ For any queries, it is advised to discuss the appointed representatives before the signing and making

Coordinator:

Dr, Nagashree N Rao, Associate Professor, Department of Biotechnology nagashreenrao@rvce.edu.in 6360962828

Student Details

Name {______ USN:_____ Branch: Phone: ___ e-mail: ___

Signature of Student

Job Prospects

Water and its manifestations in any form for the survival of the living being is the demand of the day. Water to be supplied in its purest form that to be consumed needs a master plan, After the completion of the course, students finds the avenues in Water treatment plant operator, Microbiologist for any of the industries, Water quality specialist or analyst, Start-ups and Social Enterprises, Food and allied ndustries, Water packaging and sampling Industries, Pharmaceutical and cosmetics industry,



Departments of Civil & Chemical Engineering

BASIC FABRICATION AND SERVICE

For First Year Students

SUMMARY

Improving the skills of engineering students is critical for the nation's economic development. Adequate Skills in engineering student's adequate skills can help businesses to transform themselves structurally in the ways that are necessary to adapt to the emerging technologies. The future of skilled jobs require attention to the labor market and to the employer needs for developing newer technologies. Training policies as per NEP2020 for the skill development are addressed in this program.





Paint & Accessories Handling: Painter tapes, Rollers, Brush, Putty Knife and Taping Knife, Color Mixing Combinations

Applying: Surface preparation, wall putty, primer coat, Paint mixing and applying

Tools Handling: Plumb Bob, Sprit Level, Bubble Tube, Hand Saw (Wood, PVC, CPVC and Steel), Spanners, Allen key & Wrench (Flat, Ring, Adjustable)

Area and Measurements: Plinth Area, Carpet area, Floor area, Floor Space Index, Built up area, Deductions in area calculations



Fire Safety and Fire Extinguishers, General Safety and Personal Protective Equipment's (PPE) Safety Wares & First Aid, Material Safety data sheets Chemicals/Acid spills And handling

Terms and Condition

- Only students who have paid a special lab fee to the Institution
- The students must maintain 90 % attendance for Obtaining the skill lab certificate
- Students must attend training as per scheduled Time





Acceptance

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Coordinators:

Anand Kumar B.G of Civil Engg, Phone: 9844755956, E-mail: anandkumarbg@rvce.edu.in

Dr. Vidya C, Dept of Chemical Engg, Phone: 9620166222, E-mail: vidyac@rvce.edu.in

Student Details

Name ______ USN:_____ Branch:_____ Phone:_____ e-mail:

Signature of Student

Job Opportunity

After training, the student can find employment in the area of building services, area calculations and property tax calculations. Supervision based employment in building repair/services civil and chemical laboratories



epartments of

Computer Science & Engineering and Information Science & Engineering

RV College of Engineering® IT ESSENTIALS (IT SKILSS FOR ALL)

For First Year Students

Overview:

Students apply skills and procedures to install, configure, and troubleshoot computers, mobile devices, and software.

Learn the fundamentals of connecting computers to networks. Plus, you'll enjoy working with advanced simulation tools with hands-on labs to hone your troubleshooting skills and immediately practice what you learn!



Mode of Conduction of each Module:

2 Hours Theory, 2 Hours Demo, 3 Lab Sessions of 2.5 Hours each Prepare for Careers / Employability options.

Develop skills for entry-level technical support roles (IT Support Jobs, Level1 and Level2, Voice support Executive Jobs, IT service Engineer Jobs, Network Engineer Jobs, Cloud support Executive Jobs), Prepare for Certification exams like CompTIA A+ and CCNA-level courses.

Module 1: Basics of PC, Laptops & Components
Introduction to PC Hardware: PC Components - CPUs and cooling system, Memory, Adapter cards and extension slots, Hard disk drives and SSDs, Optical storage devices ,ports, cables and adapters, Input devices and output devices. Computer disassembly & Assembly, Preventive maintenance and trouble shooting. Advanced computer Hardware: Advanced computers. Laptops and other Mobile Devices: Laptop hardware and component installation and configuration, Preventive Maintenance and troubleshooting process.

Module 3: Data Processing Essentials

- Poster Design Using Canva
- Video Editing
- Advanced features of MS word, MS Excel and MS Power Point



Module 2: Basics of OS with Installations & Configurations

Windows Installation & Upgrades (Disk cloning, other installation methods, Remote network installation), Disk Management (storage device types, Hard drive partitioning, Partitions and logical drives), Windows Configuration - Configure Windows with Control Panels, System Administration

with Control Panels, System Administration Linux OS tools and features, Linux OS best practices, BASIC CLI commands, Basic troubleshooting solutions for Linux operating systems

Module 4: Exploring visualization tools

- Google data Studio
- M S Excel
- Tableau
- Power BI

Terms and Condition

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The students must maintain 90% attendance for obtaining the skill lab certificate.

Students must attend training as per scheduled time.

Acceptance

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Coordinators: CSE

Dr. Vinay V Hegde, Dept. of CSE, RVCE,
M: 9449782211, E-mail: vinayvhegde@rvce.edu.in
Dr. K Badari Nath, Dept. of CSE, RVCE,
Mobile: 9945124747, E-mail: badarinath.kb@rvce.edu.in
Prof. Pavithra H, Dept. of CSE, RVCE,
Mobile: 9591830273, E-mail: pavithrah@rvce.edu.in

Coordinators: ISE

Dr. Anala M R, Dept. of ISE, RVCE,
M: 8618687573, E-mail: analamr@rvce.edu.in
Dr. Padmashree T, Dept. of ISE. RVCE,
M: 9632076605, E-mail: padmashreet@rvce.edu.in
Prof. Priya D, Dept. of ISE, RVCE,
M: 9986997603, E-mail: priyad@rvce.edu.in

Student Details

Name: _______
USN: ______
Branch: _____
Phone: ______
e-mail:

Signature of Student

Job Opportunity:

IT Support Jobs, Level 1 and Level2, Voice support Executive Jobs, IT service Engineer Jobs, Network Engineer Jobs, Cloud support Executive Jobs.

Course Delivery:

- 18 Interactive Lectures with demos followed by practice labs.
- Hands on PC Hardware, Laptops, OS Installations (Windows & Linux Installations), virtual laptop, and virtual desktop learning tools, IT Preventive Maintenance & Troubleshooting.



ON

Departments of
Electrical and Electronics
Electronics and Communication
Electronics and Instrumentation

BASIC HARDWARE AND SERVICE

For First Year Students

Overview:

Skills are most demanded and perishable resource in all sectors of life. Engineering skills encompass the ability to use the insights, to conceive, model and scale an appropriate solution to a problem. In the era of rapid changes and fierce competition, efforts to learn new things and acquire certain skills not only make students confident and self-assured, but also give them an advantage in the career building. Laboratory courses are essential in skills and knowledge for all engineering programs. Training policies as per NEP 2020 for the skill development are addressed in this program.



Electrical ratings, wiring, and controlling of lamps: Wiring skills and multi way control of lamps, Selection of lamp ratings, Relation between current, voltage and power

Module 1: Measurement of Solar cell parameters: Measurement of current and voltage due to varying radiation and temperature levels, shading, and tilt angle.

MeasuringInstruments: Multimeter:ACMeasurements,DCMeasurement,ComponentTesting,ContinuityTesting.CRO:BlocksIdentification,SignalDisplay,MeasurementsandLissajous Figures.

Module 2: Installation of Home appliances: Assembling and Dis-assembling of parts, Circuit testing, Testing the working condition of appliance.

Basics of Computer Networking: Identification of network components, CAT6 cable color code and crimping, RJ-45 connectors, Network cable testing.



Module 3: Regulated Power Supply(RPS): RPS Blocks Identification, Signal measurement and troubleshooting at different stages.

Circuit rig up and testing on PCB: Identification of Circuits and components. Component placement rules: Placement and Soldering of components on the board, Wiring of components, Circuit testing and De soldering

Module 4: Basics of Optical Fiber Communication

Identification of different types of optical cables, Transmission and receptions of analog and digitals signals via optical cable, Optical cable testing.

Acceptance

In order to accept and start the training of the program, students are required to sign in the provided space. Please remember that after signatures, the proposal will be set into action by RVCE/For any queries, it is advised to discuss with the appointed representatives before the signing and making it officially

Terms and Condition

Only students who have paid a special lab fee to the institution

The students must maintain 90 % attendance for obtaining the skill lab certificate

Students must attend training as per scheduled time

Coordinators:

Dr. Kariyappa B S, Prof., ECE Dept., RVCE *E-mail:* kariyappabs@rvce.edu.in. *M: 9449223582*Dr. Chayapathy V, Asso. Prof., EEE Dept., RVCE *E-mail:* chayapathiv@rvce.edu.in. *M: 7899638568*Dr. Ramesh K B, Asso. Prof., EIE Dept., RVCE *E-mail:* rameshkb@rvce.edu.in, *M: 9342522399*Dr. Premananda B S, Asso. Prof., ETE Dept., RVCE *E-mail:* premanandabs@rvce.edu.in, *M: 9844531730*

Student Details

Name: _______
USN: _____
Branch: _____
Phone: _____
e-mail:

Signature of Student

After the completion of Skill Lab training, the candidate may:

- Enter into Electrical, Electronics and Solar energy power generation industries.
- Start their own service centres for servicing and installation of Home appliances.
- Become IT technicians and networking support staff.



BASIC FABRICATION AND SERVICE

For First Year Students

Departments of Mechanical,
Aerospace Engineering & Industrial Engineering

SUMMARY

Improving the skills of engineering students is critical for the nation's economic development. Engineering students' adequate skills can help businesses to transform themselves structurally in the ways that are necessary to adapt to the emerging technologies. The future of skilled jobs requires attention to the labour market and to the employer needs for developing newer technologies. Training policies as per NEP 2020 for the skill development are addressed in this program.



Use of Hand tools

Pliers and Locking Devices, Clamps and Vices, Locking Nut Devices, Mallets and Non-Threaded Fasteners, Key Fasteners, Press Fit Assembly, Torque Wrench, Torque-Controlled Portable Power Tools.Drill/Drivers. etc

Welding and Fabrication: Welding standards Design consideration, Mathematical calculation, Safety & checklist, cutting, joining, rebuilding, Filler material consumption, Arc welding, TiG welding and Gas welding, Fabrication, Design considerations, fabrication materials, Metal fabricator's toolbox, Occupation hazards and workplace

Plumbing work: Plumbing standards, Piping materials, Valve type, Common Sanitary Fixture, Fittings, Plumber chart, Fountain system, Garden water irrigation, Water management system, Drain Waste vent



Sheet Metal Work: Basic hand tools for sheet metal works, Design of Basics, CADD basics, Sheet metal equipment, Material selection, Patterns and layouts, Metal shaping, Hammerforming, Riveting , brazing, Restoration, Occupational hazards

Tyre repair Identification of tyre repair tools, Disassemble and assemble wheel from vehicles (only tubed wheels). Type of tyre damages, Examines and probes tyre with awl to determine extent of defect; Apply the puncher, replaces treads by cutting defective tread from plies,

Terms and Condition

Only students who have paid a special lab fee to the institution

The students must maintain 90 % attendance for obtaining the skill lab certificate Students must attend training as per scheduled

time

Coordinators:

Dr. S K Harisha, Dept of Mech Engg, Phone: 9538300040, e-mail: harishsk@rvce.edu.in

Prof. Pranesh Kumar S R, Dept of Aerospace Egg. Phone: 8904484360, e-mail: praneshkumarsr@ryce.edu.in

Dr. Vijayakumar, Dept of IEM, Phone:973193233, email: vijayakumar@rvce.edu.in

Student Details

Name: ______
USN: _____
Branch: _____
Phone: _____
e-mail: _____

Signature of Student

Acceptance

In order to accept and start the training of the program, students are required to sign in the provided space. Please remember that after signatures, the proposal will be set into action by RVCE/ For any queries, it is advised to discuss with the appointed representatives before the signing and making it officially

Job Opportunity

After training, the student Careers in Welding may include Automotive, Maintenance, Construction, Fabrication and Designing sectors. Despite limited employment growth, about 13,100 openings for sheet metal workers are projected each year on an average, over the decade. Plumbers, pipefitters, and steamfitters work in factories, homes, businesses, and other places where there are pipes and related systems