



**Shahada Taluka Educational Society & Co-operative Educational Society Ltd.,
Science Senior College, Shahada Dist: Nandurbar**

**Add On Course
Year 2017-2018**

Our colleges offered plenty of Add On courses where in the students are getting trained well. The students have the option to choose the courses according to their desires .Main purpose of add on courses is to make students better prepared to meet industry demands as well as develop their own interests and aptitudes.

Features:-

- Free of Cost.
- More focus on Theory and Practical's
- Students can learn different values of this course in effective manner through practical session
- It offers hands on practice to learners .

Objectives

- To provide students an understanding of the expectations of industry.
- To improve employability skills.
- To bridge the skill gaps and make students industry ready.
- To provide an opportunity to students to develop Inter-disciplinary skills.

- **Who should participate?**

Admission is open for all stream students as per course its related to its specification.

Registration and Admission

Total intake capacity for this course is variable as per students requirement. Admission is given on basis of first come first serve. College appointed Coordinator for this course. Student can contact these coordinator in person or by phone for details.

Venue

S.T.Co-op Edu. Society Sr. Sci. College
Shahada

Duration

Duration of course is more than 30 hours. it include some theory and some practical lectures .

Course Certification

Those students who complete this course successfully, college will offer certificate to some courses.



S.T.Co-Op Education Society Senior Science
College ,Shahada
Dist:Nandurbar

Add On Course



Principal

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PRINCIPAL
S.T.Co.op.Edu.Society's Ltd.
Science Sr.College
Shahada,Dist.Nandurbar



S.T.E.S. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Add On Course

2017-18

Srno	Addon Course Name	Dept	Coordinator Name	Contact Number
1	Agriculture	Botany	Asst.Prof. Suvarna Suresh Patil	9970520105
2	Identification of Adultration in food Material	Botany	Asst. Prof. Nishiganadha Vasant Vasaiakar	7249133772
3	Instrument Handling	Electronics	Asst. Prof. Nayana Kulkarni	8857015567
4	Designing and construction of electronic circuits	Electronics	Asst. Prof. Nayana Kulkarni	8857015567
5	Soldering technique and PCB making	Electronics	Asst. Prof. Nayana Kulkarni	8857015567
6	Basics of Computer and web design	Computer Science	Asst. Prof. Kallayni C. Patil	8975174881
7	Web design	Computer Science	Asst. Prof. Kallayni C. Patil	8975174881
8	MS Office	Computer Science	Asst. Prof. Kallyani C. Patil	8975174881
9	Photoshop	Computer Science	Asst. Prof. Kallyani C. Patil	8975174881
10	Computer hardware and Networking	Computer Science	Asst. Prof. S. M. Patil	9503132015
11	Apiculture	Zoology	Dr. A. K. Mahajan	9421570764
12	Bird Diversity	Zoology	Dr. A. K. Mahajan	9421570764
13	Snake handling and awareness	Zoology	Dr. Deepali M. Gawande	9403986833
14	Statistical tools	Mathematics	Asst. Prof. P. N. Chaudhari	8275007535
15	Lab Safety	Biotechnology	Asst. Prof. S. R. Maulapatel	9834793607
16	Isolation and identification	Biotechnology	Asst. Prof. A. A. Khedkar	7798198597

	of more form of Soil/Milk/Water			
17	Physico-Chemical Parameter of Ground water	Biotechnology	Dr. S. A. Marathe	8484979796
18	Blood Group detection	Biotechnology	Dr. S. A. Marathe	8484979796
19	Soil sampling and analysis	Biotechnology	Asst. Prof. B. A. Khedkar	8698711180
20	Water, Soil Analysis	Biotechnology	Dr. S. A. Marathe	8484979796
21	Synthesis of Materials	Chemistry	Asst. Prof. Lalita A. Patil	9359249321
22	Laboratory Science	Chemistry	Asst. Prof. Sachin P. Patil	8888998210
23	Labrotary Safety	Chemistry	Asst. Prof.Irfan R.Pathan	8668401912



PRINCIPAL
S.T.Co.op.Edu.Society's Ltd.
Science Sr.College
Shahada, Dist. Nandurbar

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Agriculture

Co-ordinator Name: Asst.Prof. Suvarna Suresh Patil

Department Name: Botany

Intake Capacity: 20

Admitted Student: 17

Duration of Course: 29 Days

Syllabus: Theory 12 Lectures and Practical 18.

1) Introduction to agriculture 2) Introduction to apiculture 3) Bee Keeping equipments and Bee products 4) Bee and Agriculture 5) Bee Disease

Outcome: In shahada tehsil promegent cultivation is extensively done. Flowering is the important fact to grow fruit so that honey bee pollination can induce more and more fruit. Therefore agriculture study is important to study so that student could get practical knowledge how to grow and maintain honey bee.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Identification of Adultration in food Material.

Co-ordinator Name: Asst. Prof. Nishiganadha Vasant Vasaikar

Department Name: Botany

Intake Capacity: 20

Admitted Student: 17

Duration of Course: 30 Days

Syllabus: Theory 12 Lectures and Practical 18.

1) Introduction 2) Food Adultration 3) Food Safety 4) Consume Protection

Outcome: It can be concluded from finding of the study that students was low and it is be found that after implementing educational programme was very effective to increase the awareness regarding food adultration.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Instrument Handling

Co-ordinator Name: Asst. Prof. Nayana Kulkarni

Asst. Co-ordinator Name: Asst. Prof. Anil R. Jagdale

Department Name: Electronics

Intake Capacity: 20

Admitted Student: 13

Duration of Course: 30 Days

Syllabus: Theory 14 Lectures and Practical 16.

- 1) Brief revision of different physical quantities in electronics
- 2) Difference between AC and DC
- 3) Constructional Details and principle of working

Outcome: While studying electronics there are many instruments which will be handled by students, although students were not much aware about them. Also there is instrument like DMM which may be show its applicably in daily life and as student of electronics student may aware use of DMM.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Designing and construction of electronic circuits

Co-ordinator Name: Asst. Prof. Nayana Kulkarni

Asst. Co-ordinator Name: Asst. Prof. Anil R. Jagdale

Department Name: Electronics

Intake Capacity: 20

Admitted Student: 15

Duration of Course: 30 Days

Syllabus: Theory 14 Lectures and Practical 16.

- 1) Introduction to resister, capacitor, transformer etc.
- 2) Assembling of simple circuits
- 3) Testing and troubleshooting of circuits

Outcome: This course aimed to enhance the curiosity about the electronics and aware students about use of concepts studied in class room in real life. After completion of the course students tried to build simple electronic circuits that will be useful in daily life like water level indicator.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Soldering technique and PCB making

Co-ordinator Name: Asst. Prof. Nayana Kulkarni

Asst. Co-ordinator Name: Asst. Prof. Anil R. Jagdale

Department Name: Electronics

Intake Capacity: 20

Admitted Student: 17

Duration of Course: 30 Days

Syllabus: Theory 15 Lectures and Practical 15.

1) PCB 2) Types of PCB 3) What is soldering 4) Basic metals 5) Soldering mechanism 6) De soldering with warm and soldering paste 7) Lead free soldering 8) Types of soldering bits

Outcome: This course will be useful in enhancing the PCB making and soldering skill of student.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Basics of Computer and web design

Co-ordinator Name: Asst. Prof. Kallayni C. Patil

Asst. Co-ordinator Name: Asst. Prof. Bhagyashri P. Bhangale

Department Name: Computer Science

Intake Capacity: 20

Admitted Student: 15

Duration of Course: 30 Days

Syllabus: Theory 16 Lectures and Practical 14.

1) Basic of Computer 2) Memory: RAM, ROM, PROM etc. 3) Input devices, output devices and printers 4) Computer network

Outcome: student will able to know computers part, access internet, email sending, hardware components etc. Student will know the operating system.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Web design

Co-ordinator Name: Asst. Prof. Kallyani C. Patil

Asst. Co-ordinator Name: Asst. Prof. Bhagyashri P. Bhangale

Department Name: Computer Science

Intake Capacity: 20

Admitted Student: 16

Duration of Course: 30 Days

Syllabus: Theory 16 Lectures and Practical 14.

1) HTML tags 2) Image tags and table creation 3) Frames 4) Style sheets

Outcome: Student will implement interactive web pages using HTML. Student can design web pages.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: MS Office

Co-ordinator Name: Asst. Prof. Kallyani C. Patil

Asst. Co-ordinator Name: Asst. Prof. Bhagyshri P. Bhangale

Department Name: Computer Science

Intake Capacity: 20

Admitted Student: 14

Duration of Course: 30 Days

Syllabus: Theory 18 Lectures and Practical 12.

1) MS Word 2) MS Excel 3) MS Power point

Outcome: Students will create documents that demonstrate proficiency in the use of word processing, spreadsheet and presentation applications. Student will create, edit, save and print documents to include documents with list and tables.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Photoshop

Co-ordinator Name: Asst. Prof. Kallyani C. Patil

Asst. Co-ordinator Name: Asst. Prof. Bhagyshri P. Bhangale

Department Name: Computer Science

Intake Capacity: 20

Admitted Student: 15

Duration of Course: 30 Days

Syllabus: Theory 12 Lectures and Practical 18.

1) Photoshop tools 2) Brushes, creating new images 3) Applying Filters

Outcome: Students will familiar to work with photoshop workspace. Students will transform images. Students will editing images.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Computer hardware and Networking

Co-ordinator Name: Asst. Prof. S. M. Patil

Asst. Co-ordinator Name: Asst. Prof. K. C. Patil

Department Name: Computer Science

Intake Capacity: 22

Admitted Student: 25

Duration of Course: 30 Days

Syllabus: Theory 19 Lectures and Practical 16.

1) Introduction about computer 2) Basic networking concepts 3) Introduction to various networking devices 4) Inside the PC 5) Network basic and configuration 6) Introduction to servers and network security

Outcome: Students know all the basic of hardware of computer. Student knows the structure of IC's. Student knows the concept of broadband, router, modem etc.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Apiculture

Co-ordinator Name: Dr. A. K. Mahajan

Asst. Co-ordinator Name: Asst. Prof.

Department Name: Zoology

Intake Capacity: 20

Admitted Student: 11

Duration of Course: 30 Days

Syllabus: Theory 12 Lectures and Practical 18.

1) Introduction to apiculture and systematic position of bee species 2) Morphology and anatomy of bee 3) Colony organization and life cycle 4) Bee keeping equipments and apiary management

Outcome: Students will identify different species of honey bees. Students will get the knowledge of morphology and anatomy of bees. Students will know the cast of bees.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Bird Diversity

Co-ordinator Name: Dr. A. K. Mahajan

Asst. Co-ordinator Name: Asst. Prof.

Department Name: Zoology

Intake Capacity: 20

Admitted Student: 17

Duration of Course: 30 Days

Syllabus: Theory 12 Lectures and Practical 18.

1) Introduction 2) Avian diversity and classification 3) Feathers and plumages 4) Identification key of birds 5) Nesting of birds 6) Bird conversation

Outcome: Students will be exposed to the diversity of bird life on earth. Students will get knowledge of behavior of birds. They will identify the local birds.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Snake handling and awareness

Co-ordinator Name: Dr. Deepali M. Gawande

Asst. Co-ordinator Name: Asst. Prof.

Department Name: Zoology

Intake Capacity: 20

Admitted Student: 13

Duration of Course: 30 Days

Syllabus: Theory 12 Lectures and Practical 18.

1) Study of habitat snakes 2) Morphology of snakes 3) Poisonous and non poisonous snakes 4) Snake bite and its mechanism 5) effect of snake venom on human

Outcome: Student will learn the habit and habitat snake. They will learn about the tools used to handle the snake. Student will identify the type and morphology of snake.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Statistical tools

Co-ordinator Name: Asst. Prof. P. N. Chaudhari

Asst. Co-ordinator Name: Asst. Prof. Y. D. Patil

Department Name: Mathematics

Intake Capacity: 20

Admitted Student: 18

Duration of Course: 30 Days

Syllabus: Theory 14 Lectures and Practical 16.

- 1) Introduction to data
- 2) Examining numerical data
- 3) Examining categorical data
- 4) Probability
- 5) Distributions of random variables

Outcome: Student known all basic statistical data, mostly students understood or identify the variables, data collection, numerical methods and also related terms.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Lab Safety

Co-ordinator Name: Asst. Prof. S. R. Patil

Asst. Co-ordinator Name: Asst. Prof. B. A. Khedkar

Department Name: Biotechnology

Intake Capacity: 20

Admitted Student: 13

Duration of Course: 30 Days

Syllabus: Theory 12 Lectures and Practical 18.

1) Introduction To Lab 2) Lab Safety 3) Personal Protection and preservation of food 4) Types of Hazard 5) Spoilage and waste disposal 6) Toxic Material 7) Care and handling of glassware 8) handling of equipment

Outcome: Students introduced to lab. Students are identify and isolate micro organism and handle toxic material

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Isolation and identification of more form of Soil/Milk/Water

Co-ordinator Name: Asst. Prof. A. A. Khedkar

Asst. Co-ordinator Name: Asst. Prof. S. R. Patil

Department Name: Biotechnology

Intake Capacity: 20

Admitted Student: 10

Duration of Course: 30 Days

Syllabus: Theory 12 Lectures and Practical 18.

1) Basic Technique of microbiology 2) Serial Dilution method 3) Gram positive and gram negative microorganism 4) Study of virus 5) handling instruments 6) Principal of Laminar air flow 7) Staining technique

Outcome: Students can be isolated the different types of microbes and identify them. Students also study all isolation technique of micro organism from soil/water/milk.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Physico-Chemical Parameter of Ground water

Co-ordinator Name: Dr. S. A. Marathe

Asst. Co-ordinator Name: Asst. Prof. B. A. Khedkar

Department Name: Biotechnology

Intake Capacity: 20

Admitted Student: 16

Duration of Course: 30 Days

Syllabus: Theory 12 Lectures and Practical 18.

1) Basic Concept of H₂O 2) Improvement of water quality 3) Physiochemical parameter 4) Water Sampling 5) COD and BOD 6) Significance of water

Outcome: Improve water quality. Study about heavy metals of water

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Blood Group detection

Co-ordinator Name: Dr. S. A. Marathe

Asst. Co-ordinator Name: Asst. Prof. S. R. Patil

Department Name: Biotechnology

Intake Capacity: 20

Admitted Student: 10

Duration of Course: 30 Days

Syllabus: Theory 12 Lectures and Practical 18.

1) Introduction of blood 2) Definition of blood 3) Types of blood cells 4) Blood grouping 5) Antigen antibody interaction 6) Donor and acceptor of blood 7) Ph of blood 8) application of blood cells

Outcome: To know whole knowledge about blood and blood factors. Detection of prothrombin. To know donor and acceptor of blood group

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Soil sampling and analysis

Co-ordinator Name: Asst. Prof. B. A. Khedkar

Asst. Co-ordinator Name: Asst. Prof. R. J. Valvi

Department Name: Biotechnology

Intake Capacity: 20

Admitted Student: 16

Duration of Course: 30 Days

Syllabus: Theory 12 Lectures and Practical 18.

1) Introduction of soil sampling and analysis 2) AAS 3) Flame photometer 4) UV-Visible spectrophotometer 5) PH meter 6) Conductivity meter

Outcome: Students are able to sample, process and analysis the soil for some important of micronutrient. To analysis micro and macro nutrients.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name:

Co-ordinator Name: Dr. S. A. Marathe

Asst. Co-ordinator Name: Asst. Prof. S. R. Patil

Department Name: Biotechnology

Intake Capacity: 20

Admitted Student: 11

Duration of Course: 30 Days

Syllabus: Theory 12 Lectures and Practical 18.

1) Concept of water and soil 2) Types of water and soil 3) Water treatment 4) Domestic water treatment

Outcome: To study physical and chemical parameters of water, soil and to control water, soil pollution. To study domestic waste water treatment.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Synthesis of Materials

Co-ordinator Name: Asst. Prof. Lalita A. Patil

Asst. Co-ordinator Name: Asst. Prof.

Department Name: Chemistry

Intake Capacity: 20

Admitted Student: 16

Duration of Course: 30 Days

Syllabus: Theory 22 Lectures and Practical 8.

1) Introduction to material Synthesis 2) Types of compounds 3) Application of Material synthesis.

Outcome: Students will understand the different materials and different routes for their synthesis in lab.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Laboratory Science

Co-ordinator Name: Asst. Prof. Sachin P. Patil

Asst. Co-ordinator Name: Asst. Prof.

Department Name: Chemistry

Intake Capacity: 20

Admitted Student: 15

Duration of Course: 30 Days

Syllabus: Theory 22 Lectures and Practical 8.

1) Introduction to laboratory science 2) Lab safety 3) Preparation chemistry

Outcome: They become skillful about the different techniques in lab. Able to synthesize compounds using green chemistry.

College Name: S.T. Co-Op Education Society's Ltd, Science Sr. College, Shahada

Year: 2017-2018

Course Name: Laboratory Safety

Co-ordinator Name: Asst. Prof. Irfan R. Pathan

Asst. Co-ordinator Name: Asst. Prof.

Department Name: Chemistry

Intake Capacity: 20

Admitted Student: 17

Duration of Course: 30 Days

Syllabus: Theory 22 Lectures and Practical 8.

1) General introduction to laboratory 2) Lab safety 3) How to handle chemicals 4) How to handle toxic chemicals

Outcome: Students are able to understand the importance of lab safety. They are able to handle the instruments and chemicals carefully.
