



**S.T.E.S. & Co-Op. Eduⁿ Society Ltd.,
Science Sr. College, Shahada Dist:Nandurbar**

VOCATIONAL EDUCATION TRAINING

Programme

YEAR 2013-14

Principal: Dr. R. D. Patil

Contact No:- (02565)-223122

Co-ordinator: Asst.Prof. Asha R. Patil

Contact No:-9604477844



S. T. E. S. & Co-Op. Eduⁿ Society Ltd.,
Science Sr. College, Shahada Dist:Nandurbar

Vocational Education Training (VET) Programme 2013-14



Vision:

To developed skill and empowerment to poor and unemployed youth through skills and livelihoods.

Goals:

- College is to help our students to enhance their job skills.
- Students are encouraged to try to find training in the occupational field.
- Build the confidence to find job easily.
- To improve, extension of skills and create economic opportunities in different fields.

Course Offered:-

- [F.Y.Students :- 1.Electronics](#)
- [S.Y.Students :- Building Construction](#)
- [T.Y Students:- Automobile](#)

Future Opportunity

- Electronic Field
- Building Assistant
- Construction Field
- Automobile Field

Note:-Only S. T. E. S. & Co-Op. Eduⁿ S. Ltd. Science Sr.College, Shahada. Students are enrolled for this Programme

CONTACT US

- **Asst.Prof. Asha R.Patil** **Head ,Computer Department** **9860594565**
- **Dr. Deepali M. Gavande** **Head ,Zoology Department** **7020981630**

Duration:-30 days Time 9:00am

Resource Person:- 1. Mr. B. N. Chaudhary 2. Mr. S. G. Patil 3. Mr. M. M. Ahire 4. Mr. B. R. Patil



**S. T. E. S. & Co-Op. Eduⁿ Society Ltd.,
Science Sr. College, Shahada**

Vocational Education and Training Programme Syllabus

Tread: ELECTRONICS TECHNOLOGY

Paper Title: Applied and Industrial Electronics

Paper Code: 101

Theory

Sr. No.	Unit	Sub-unit	Period
1	Electronic Timers	1.1 Introduction to IC-555 1.2 Astable ,monostable multi vibrator 1.3 Application	06
2	Optoelectronic Devices	2.1 Photo diode 2.2 Photo Transistor 2.3 LDR 2.4 FOC	05
3	Motors	3.1 Motor Fundamentals 3.2 Speed Control of Motor 3.3 Applications	05
4	Modern Electronic Machine	4.1 Copier (Xerox) 4.2 Scanner 4.3 Lamination Machine 4.4 I-Card making 4.5 Emergency Light 4.6 Fax	14

Practical -

Sr. No.	List of Practical's	Periods
1	Study of IC-555 in Monostable mode	2
2	Study of IC-555 in Astable mode	2
3	Demonstration Of Copier Machine	2
4	Demonstration Of Scanning of document	2
5	Construct a circuit of speed control of DC motor	2
6	Study - characteristic of Photo Diode	2
7	Demonstration of FAX machine.	2
8	Construct and Study FSK using IC-555	2



**S. T. E. S. & Co-Op. Eduⁿ Society Ltd.,
Science Sr. College, Shahada**

Vocational Education and Training Programme Syllabus

Tread: - Construction Technology

Paper Title - Building Material & Safety Management

Paper Code: 102

Theory

Sr.No	Unit	Sub-unit	Period
1	Stone	1.1 Introduction 1.2 Usefulness of stone in construction industry 1.3 Trading business of stone and its product 1.4 Types of stone from different rocks Like- Quartzite, marble, granite etc 1.5 Properties of different types of stones	6
2	Aggregates	2.1 Introduction:-Explain importance of aggregate in concrete as well as in Construction industry. 2.2 Definition and properties of good quality Aggregates 2.3 Types of aggregates according to source , size , shape etc 2.4 Applications	10
3	Bricks	3.1 Introduction History of brick and general information. 3.2 Function of bricks in building construction Industry 3.3 Soil B.B. bricks : properties of bricks 3.4 Fire bricks: general, properties, Uses etc. 3.5 Fly ash bricks: general, properties, Uses etc 3.6 Concrete bricks solid and hollow block, general, properties, Uses etc 3.7 Light weight bricks. (AAC/ ACC / ALC bricks)Autoclaved aerated concrete bricks. general, properties, Uses etc	14

PRACTICAL-

Sr. No	Practical	Periods
1	Study of market for stones and their market forms.	2
2	Identification and use of different types of stone. Durability test of different stone.	2
3	Study of crusher project through PPT or recording & flow diagram.	2
4	Determine the bulking of sand and clay and silt content in an aggregate	2
5	To conduct field tests of bricks to prove the quality of different types of bricks. Colour,surface,texture,size,absorption etc.	2
6	Efflorescence test of bricks	2
7	Dimensions and tolerance test of bricks	2
8	Determination of compressive strength of all types of bricks. Soil bricks, fly ash, AC, concrete bricks.	2



**S. T. E. S. & Co-Op. Eduⁿ Society Ltd.,
Science Sr. College, Shahada**

Vocational Education and Training Programme Syllabus

Tread: - Construction Technology

Paper Title - Automotive Vehicle Technology Theory Paper Code: 103

Sr. No.	Unit	Sub-unit	Period
1	Clutch	1.1 Objectives/purpose to clutch 1.2 Classification of clutch 1.3 Parts of clutch and their function 1.4 General character of ideal clutch 1.5 Detail study of types of clutch friction 1.6 Clutch adjustments 1.7 How to operate clutch, Double operating	06
2	Gear box	2.1 Introduction to gear box and its purpose 2.2 Resistance to speed of vehicle 2.3 Type of gear 2.4 Principle of gear box 2.5 Construction of gear 2.6 Over drive 2.7 Gear box sensor	08
3	Brake	3.1 Introduction to brake 3.2 Function of brake 3.3 Characteristic of brake 3.4 Classification of brake a) external contacting b) internal contacting brake 3.5 Types construction and working of internal 3.6 Introduction of hand brake 3.7 Principles of hydraulic brake system 3.9 Brake bleeding 3.10 Characteristic of brake oil 3.11 Brake lining material	08
4	Wheels and tires	4.1 Purpose of tyre 4.2 Types of tyre-solid, pneumatic and tubeless 4.3 Types of wheels, split tyre, disc, pressed steel wire and spoked wheels 4.5 Repairs of tyres and tubes	05
5	Diagnosis of vehicle repair	9.1 Standard operation procedure for repair and servicing of vehicle 9.2 Use of skill i.e test drive, core skills, generic skills, writing skills	03

PRACTICAL-

Sr. No	Practical	Periods
1	Dismantle multiplate clutch of any motorcycle, clean, inspect for worn out plates and hub and, report on condition, suggest remedial measures, repair & refit .Adjust free play of clutch.	2
2	Dismantle hydraulic clutch. Check leakages of servo cylinders. Overhaul clutch master cylinder check oil level. Change if necessary. bleed the system	2
3	Overhaul Gear Box of any four stroke motorcycle, clean, inspect, report on condition ,suggest remedial measures ,repair & refit.	2
4	Overhaul the Handle Bar Assembly of motorcycle.	2
5	Overhaul brake Master & Wheel cylinder of car/jeep.	2
6	Overhaul the disc brake system.	2
7	To top up Brake fluid and carry out Brake Bleeding process.	2
8	Study and demonstrate wheel balancing process of a car .	2



Rupai
PRINCIPAL
S.T.Co.op.Edu.Society's
SCIENCE SR. COLLEGE
SHAHADA, Dist. Nandurbar



**S. T. E. S. & Co-Op. Edu^n Society Ltd.
Science Sr. College, Shahada Dist:Nandurbar**

YEAR 2013-14

VOCATIONAL EDUCATION TRAINING PROGRAMME

CERTIFICATE

Year- 2013-14

This is to certify that Mr./Miss.-----

Students of the S.T.E. S. & Co-Op. Edu^n Society Ltd. Science Sr. College Shahada organized

Vocational Education Training programme in Construction Technology/ Electronics

Technology / Automobile has successfully completed within period with practical knowledge

under the guidance and its own contribution.

Co-Ordinator
Vocational Education Training Programme
S.T.Co-Op.Edu. Society's Ltd.
Science Sr. College
Shahada, Dist. Nandurbar

**Co-ordinator
(VET Programme)**

Principal
S.T.Co-Op. Edu. Society's
SCIENCE SR. COLLEGE
SHAHADA, Dist. Nandurbar

Principal