



# Gujarat Council of Vocational Training Gandhinagar



1. Name of Course:

SPRINKLER IRRIGATION SYSTEM

N.C.O. No. for Skills Covered:  
(Please refer National Classification of  
Occupations -2004 available  
On www.dget.nic.in)


2. Engineering OR Non-engineering: Non-Engineering

3. No. of students per batch: 20

4. Duration in Hours. : 100 Hours

5. Duration in Month: 1 Months @ 42 hours/Week.

Duration in Month: 2 Months @ 22 hours/Week.

6. Examination Scheme:

No.	Name of Subject	Teaching Hours during full course.	Maximum Marks. (Excluding Sessional)	Minimum Marks required for Passing (Excluding Sessional).	Sessional Marks if any.
Subject-1	Trade Theory	30	50	20	10
Subject-2	Practical	70	150	90	50
Subject-3					
Subject-4					
Subject-5					

7. Entry qualification for Trainee:

Minimum entry qualification (Essential):	4 <sup>th</sup> Pass, Above age 14 years
Desirable:	10 <sup>th</sup> pass.

8. Minimum qualification for Trainer:

Minimum qualification (Essential):	B.Sc. Agri.
Desirable:	B.Sc. Agri. With 3 years of expe.





# Gujarat Council of Vocational Training Gandhinagar



## 9. Syllabus Committee Member:

Sr. No.	Name	Organization	Designation	Technical Qualification	Experience in Years	Sign.
1	Mr. S.A. Pandav sir	Regional office(Rajkot)	Regional deputy director	B.E.(Civil)	15 years	
2	Mr.V.K.Bhatisir	I.T.I. Junagadh	Nodal Principal	B.E.(Chem.) LL.B. Spc.	33 years	
3	Ms. Manishaben Vaghela	I.T.I. Porbandar	Principal	Diploma in Mechanical	3 years	
4	Mr.A.M.Ghadiyali	Fisheries Department	Superintendent of fisheries, Por.	M.Sc.	20 years	
5	Mr.Sheikh sir	Fisheries Dep. Veraval	Superintendent of Fisheries, Veraval	B.sc.	20 years	
6	Dr.A.M.Pandya	Kanoni University Junagadh	Director Extension Education	P.H.D.	20 years	
7	Mr.V.K. Shuklasir	Fisheries Dep., Veraval	Ass. Director fisheries	B.Sc- Zoology	20 years	
87	Mr.Mh. Hussein	Ronak Agency - mbc	Owner	10 pass	20 Years	
88	Mr. V.R.Thanki	ITI, Junagadh	(Fix) Sup.Instr.	DCE	3 years	
89	Mr.I.H.Pathan	ITI, Junagadh	(Fix) Sup.Instr.	DAE	5 years	

## 10. Terminal Skills of trainee: (Should be well defined and having reference to NCO):

The trainee, after successful completion of training, will have following skills...

1. Install sprinkler system.
2. Could maintain Sprinkler system.
3. Able to use irrigation system.
4. Could detect any defect in the system.
5. Could repair the system effectively.





**Gujarat Council of Vocational Training  
Gandhinagar**



11. Approximate cost of Tools  
/ Equipments / Machinery for  
Starting one batch of the course:

Rupees  
1.5 to 2.0 lacs

Reference Year

12. Area required for practical / Workshop for one batch.

70-100 Sq. Meter

13. Minimum Power connection required

20 K.W.

14.1 No of items in Standard list of Machinery :

12

14.1.1. Page NO from 4 to 5.

14.2 No of items in Standard list of Shop outfit :

8

14.2.1. Page NO from 4 to 5.

14.3 No of items in Standard list of Trainee Toll-Kit :

7

14.1.1. Page NO from 4 to 5.

\*\*\*\*\* FOR OFFICIAL USE \*\*\*\*\*

Approved by GCVT in Governing Body meeting on

: 07-06-2012

Syllabus implemented w.e.f. admission session

: Next session

Revision History :

1. Revision No..... Revision Date.
2. Revision No..... Revision Date.
3. Revision No..... Revision Date.





Standard List of Machinery - Equipment / Shop-outfit / or Trainee Toolkit  
For Trade of SPRINKLER IRRIGATION SYSTEM

Sr. No.	Description of Item with detailed specifications	Item type i.e. Machinery / Equipment OR Shop Outfit OR Trainee Toolkit	Quantity Required per one Batch of Students	Quantity Required per one Batch of Students for Instructor	Total Quantity Required (Total of previous two columns)
1.	Whirling sprinkler	Machinery	2	-	2
2.	Rotary sprinkler	Machinery	2	-	2
3.	Pop up sprinkler	Machinery	2	-	2
4.	Alluminum pipe with quick coupling	Machinery	5	-	5
5.	Riser	Machinery	1	-	1
6.	Take off valve	Machinery	2	-	2
7.	Flow control valve	Machinery	2	-	2
8.	Pipe wrench 18in/24in	T.Toolkit	5	-	5
9.	Chain wrench	T.Toolkit	5	-	5
10.	Pipes dies	Machinery	2	-	2
11.	Pipes vices	Machinery	2	-	2
12.	Chain puller block with tripod	Machinery	1	-	1
13.	Putter	Machinery	1	-	1
14.	Holding clamps	Machinery	2	-	2
15.	Fix spanner set	T.Toolkit	10	1	11
16.	Ring spanner set	T.Toolkit	10	1	11
17.	Pliers	T.Toolkit	5	1	6
18.	Hammer set	T.Toolkit	10	1	11
19.	Screw driver set	T.Toolkit	10	1	11
20.	Instructor chair and table	Shop outfit	-	1	1





## Gujarat Council of Vocational Training Gandhinagar



Sr. No.	Description of Item with detailed specifications	Item type i.e. Machinery / Equipment OR Shop Outfit OR Trainee Toolkit	Quantity Required per one Batch of Students	Quantity Required per one Batch of Students for Instructor	Total Quantity Required (Total of previous two columns)
21.	Dual desk	Shop outfit	20	-	20
22.	Stools	Shop outfit	20	-	20
23.	First aid box	Shop outfit	1	-	1
24.	Book shelf(glass panel)	Shop outfit	1	-	1
25.	Multimedia projector	Shop outfit	1	-	1
26.	Magnetic white board	Shop outfit	1	-	1
27.	Display board	Shop outfit	1	-	1
28.					
29.					
30.					
31.					
32.					
33.					
34.					
35.					
36.					
37.					
38.					
39.					
40.					

(As many sheets as required should be used to accommodate all items)





**Gujarat Council of Vocational Training  
Gandhinagar**



**GUJARAT COUNCIL OF VOCATIONAL TRAINING  
GANDHINAGAR**

Name of Syllabus : Sprinkler Irrigation system

Sector : Agriculture

Terminal Competency

1. Very good presence of mind.
2. Observe the safety precautions while working.

<b>Theory</b>	<b>Practical</b>
<p>(A) Introduction</p> <ol style="list-style-type: none"><li>1. History</li><li>2. Knowledge on Health and Safety</li><li>3. Objective</li></ol> <p>(B) Understanding &amp; Knowledge of Sprinkler System.</p> <ol style="list-style-type: none"><li>1. Understanding of Sprinkler System.</li><li>2. Working principle &amp; constructional details of system.</li><li>3. Different types of Sprinkler system.</li><li>4. Classification of system.</li><li>5. Advantage of system.</li><li>6. Method of use of system.</li></ol> <p>(C) Installation, construction detail.</p> <ol style="list-style-type: none"><li>1. Working principle and construction detail of system.</li><li>2. Installation of system.</li><li>3. Care and maintenance of sprinkler system.</li></ol> <p>(D) Trouble Shooting</p> <ol style="list-style-type: none"><li>1. Periodic Maintenance</li><li>2. Trouble Shooting and remedies.</li></ol>	<p>(A) Safety precautions</p> <ol style="list-style-type: none"><li>1. Precautions on installation.</li><li>2. Precautions taken while working.</li></ol> <p>(B) Identification</p> <ol style="list-style-type: none"><li>1. Identification of different components.</li><li>2. Demonstration of sprinkler installation of field.</li><li>3. Adjustment of sprinkler.</li></ol> <p>(C) Dismantle and assemble the sprinkler system.</p> <p>(D) Field operation of sprinkler system.</p> <p>(E) Trouble shooting.</p> <ol style="list-style-type: none"><li>1. Trouble shooting and remedies on field.</li><li>2. Repair of sprinkler system.</li></ol>

Signature :

