

## THIAGARAJAR COLLEGE OF ENGINEERING - MADURAI 625 015 TCE-III

| S.N  | One credit course need analysis sheet                   |                      |  |  |  |  |  |
|------|---|----------------------|--|--|--|--|--|
| 1.   | Name of the Course                                      | Solar Power Plant    |  |  |  |  |  |
| 2.   | Name of the Industry                                    | National Instruments |  |  |  |  |  |
| 3.   | Name of the SIG associated with                         |                      |  |  |  |  |  |
| 4.   | Motivation for offering the course                      |                      |  |  |  |  |  |
| 4.1  | 4.1 Feedback  |                      |  |  |  |  |  |
|      | (If yes, Details of the feedback as per the annexure I) |                      |  |  |  |  |  |
| 1    | From Recruiter  | Y/N                  |  |  |  |  |  |
|      | From Employer   | Y/N                  |  |  |  |  |  |
| 1    | From Alumni   | Y/N⁄                 |  |  |  |  |  |
|      | From Academic Council members                           | Y/N                  |  |  |  |  |  |
|      | From Board of Studies members                           | Y/N/                 |  |  |  |  |  |
|      | From Senior students                                    | Y/N                  |  |  |  |  |  |
|      | From current students                                   | Y/N⁄                 |  |  |  |  |  |
|      | From Performance Assessment                             | Y/N                  |  |  |  |  |  |
|      | Committee   |                      |  |  |  |  |  |
|      | From Department Advisory                                | Y/N⁄                 |  |  |  |  |  |
|      | committee   |                      |  |  |  |  |  |
| 4.2  | Faculty participation in Seminar/FDP                    | (If yes, details)    |  |  |  |  |  |
|      | At higher learning institutes                           |                      |  |  |  |  |  |
|      | At Industry   |                      |  |  |  |  |  |
| 5.   | Outcomes expected                                       |                      |  |  |  |  |  |
|      | Technology transfer                                     |                      |  |  |  |  |  |
| ł    | Student Internship                                      | ·                    |  |  |  |  |  |
| H    | Placement   |                      |  |  |  |  |  |
|      | Organizing FDP/seminar at TCE                           |                      |  |  |  |  |  |
| +    | G. H. L the massage had a new tenev                     |                      |  |  |  |  |  |
| 1    | Collaborative research/consultancy                      |                      |  |  |  |  |  |
| L    | projects  |                      |  |  |  |  |  |
|      | Faculty as Trainee/Trainer in the                       |                      |  |  |  |  |  |
| : ]] | Industry  |                      |  |  |  |  |  |
| Γ.   | Joint publications                                      |                      |  |  |  |  |  |
|      | Setting up of Lab/Infrastructure                        |                      |  |  |  |  |  |
|      | occurs ap or -  |                      |  |  |  |  |  |



## THAGARAJAR COLLEGE OF ENGINEERING - MADURAL 625 015

TCE-III

### Course Schedule

Name of the Course:

Solar Power Plant

Name of the Industry:

National Instruments, Banglone.

Name of the Expert:

Mr. S. Ananth Kumar.

Number of Students enrolled:

33

Name of the Faculty:

Dr. B. Ashok kumar.

Date/Time/Venue:

List Enclosed

| Date | Time | Topics | Remarks |
|------|------|--------|---------|
| Day1 |      | ,      | ,       |
| ;    |      |        |         |
| Day2 |      |        |         |
|      |      |        |         |
|      |      |        |         |
|      |      |        |         |

Signature of the Faculty coordinator

Thiagarajar College of Engineering, Madurai-15
(A Govt. Aided ISO 9001:2008 Certified Autonomous Institution affiliated to Anna University)

Department of Electrical & Electronics Engineering

31.07.16

## One credit course E1N-Solar Power Plant Schedule

| Date     | 9 AM -10.30 AM  | 11.AM-1.00 PM  | 2.00 PM - 3.30 PM   | 3.45 PM-5.15 PM   |
|----------|---|--|---|---|
| 30.07.16 | Solar power plant- Solar Panels - Thin film, Csi-Solar Panel characteristics - Types of Inverters-Central, String, Micro-Inverters- | Solar Power Plant - Layout and other equipments- PV Penetration level- Analysis of any power plant layout architecture | Inverters- Inverter Topology-DC Link reference, Switching Topologies, modulation strategy- Booster-                       | Grid Synchronization - PLL, IN-rush current- MPPT Algorithms - P&0, Incremental conductance, Fast sweep- Current controller and Voltage feed forward- Stability Analysis. |
| 31.07.16 | Grid Codes - Standards - Protection- Relay self test, PV Insulation Test, Residual current, ARC fault detection-                    |  | Grid support<br>functionality-<br>Ride-through,<br>Reactive Power –<br>Types, Active<br>power derating<br>with frequency. | Applications-<br>PV Diesel,<br>Island inverters<br>- with external<br>UPS.  |

TCE-III-AS-P1/2

TCE-III



# THIAGARAJAR COLLEGE OF ENGINEERING - MADURAI 625 015.

Course Instructor Feedback for  $\underline{\mathsf{One}}/\mathsf{Two}$  credit course

TCE-III

Name of the Course: Solar Power Plant

Name of the Industry: National Instruments, Banglore Mr. S. Ahanth Kumar.

Name of the Expert:

Date/Time/Venue:

|  | Comments                               |
|--|--|
| Student attendance   | 33                                     |
| Level of the students in understanding the concepts  | Gwod                                   |
| Any suggestions regarding<br>new content to be included<br>as Prerequisites/Special<br>electives | Practical Sessions can<br>be conducted |
| Hall/Lab<br>arrangements   | Grood                                  |
| Hospitality  | Good                                   |

Signature of Head of the Department

# Thiagarajar College of Engineering, Madurai-15 (A Govt. Aided ISO 9001:2008 Certified Autonomous Institution affiliated to Anna University)

Department of Electrical & Electronics Engineering

30.07.16

#### One credit course Student Attendance

Semester: VII EEE (A&B)

|   |  | Control and the state of the st | I ag of LOCKIN                   | 30.07.16(AN)     | 31.07.16(FN)  | 30.07.16(AN)   |
|---|--|--|----------------------------------|------------------|---------------|--|
| S.NO  | REG  | NAME OF THE  | 30.07.16(FN)                     | 30.07.10(711.7)  |               | ,  |
|   | NO   | STUDENT  | DA AA                            | Pan Bola         | about med D   | P. Quenada   |
| 1.  | 13E58  | MANOBALA P.  | P Ocenafidia                     | 1 may grow       | not plan      | 7. Finettshim  |
| 2.  | 131:64   | MUTHULAKSHMI T.  | T. Nathuk hohmi                  | 7. Finhat hom    | 8 Names       | & Vancers  |
| 3.  | 131:68   | NAVIEN S.  | 118, Nauceer                     | - Want           |               | CALO A   |
| 4   | 13E69  | NAVRIN AASHIKA A.  | A. David                         | d. M. Asli       | La Padrine    | 8. Parm  |
| 5.  | 13E72  | PADMAVATHI K.  | K. Padma                         | k Padmes         | K A DOOL      | 012-31   |
| 6.  | 131:73   | PASUMPONRAJA M.  | T. D. ST. A. S.                  | - Worked         | 230           | mark.  |
| 7.  | 13E76  | RAGUL M.   | Thinkgute                        | that the         | MARY          | S. Raya  |
| 8.  | 13E77  | RAJARAM S.   | c pr/m                           | 8:100            | Soldier       | daye   |
| 9,  | 131:78   | RAKESH KUMAR   | Mul                              | Min              | Car           | S. Rakell.   |
| 10.   | 131:79   | RAKESH S.  | 5. Raken.                        | 5. Rokush        | 3 Carco       | N. Const   |
| 11.   | 131:80   | RAMESH KUMAR M.  | 17-Poist 0                       | W. Loude         | 5000          | THE PARTY OF THE P |
| CONTRACTOR OF THE PERSON NAMED IN                 | 13E84  | RISHMA M.  | Kil 19                           | Riay.            | - Krish       | THE INTERPRETATION   |
| 12.   | 13E85  | SABAREE PRASATH  | South Lath                       | Shephill         | Sololo        | Shope  |
| 13.   | 131305   | 6.11   |                                  | J Birdi          | MODE          | O. Burker  |
|   | 13E88  | SANTHIYAGU A.  | A August                         | continuation     | edutelin      | 10 easter  |
| 14.   | 13E89  | SANTHOSH KUMAR V.  | Carathorna                       |                  | 1.9.1         | F Cates  |
| 15.   | 13E93  | SATHIYA E.   | E. Ordhy.                        | E grather        | 1.91          | 5.10   |
| 16.   | 13E94  | SELVARAJ S.  | 5.50WJ4                          | 5 selicit        | 9845          | Hory   |
| 17.   | 13E96  | SHEIK MOHAMED A.   | dehis                            | deres            | Striken       | S. Shine   |
| 18.   | 13E97  | SHRIYANSI S.   | 9. ghay                          | 8.8 hijan        | TV M          | Vanish   |
| 19.   |  | SUJATHA K.   | IL. Bruights                     | K. Bugasho       | 2 Aughe       | S Pasaloph   |
| 20.   | 13E100   | SUNDARA LAKSHMI G.   | onderoleka<br>N. B. R. L. B. S.Y | anderelept       | N. B. Q. List | N. S. Sumon  |
| 21.   | 13E101   | SUSHMITHA SRI N.S.   |                                  | N.S Dalie By     | 14.6/11       | 56/11  |
| 22.   | 13E102   | THARUN K.  | The party                        | Mai              | S. heyra      | S. The Na  |
| 23.   | 13E104   | THEYVALAKSHMI S.   | 3 They valely                    | 3.7              |               | 10   |
| 24.   | 13E105   | UMA MAHESWARI S.   | S. Unarpheumi                    | sunapraheuni     | S. Lyanghea   | New Constitution   |
| 25.   | 13E107   | VAISHNAV M.  | M. Value                         | NAM              | Mym           | ALL ALL  |
| 26.   | 13E109   | VENGALA MOORTHY  | A. Vagada Howthy                 | A Vergela Monthy | Aveguent      | Avange   |
| 27.   | 13E110   |  | V                                | 0                | 1 1/4 6       | YA. 1. 6   |
|   | and the same of th | A.<br>VENKATESH M.   | M. Venty                         | Miland           | N. Vong       | 17 200   |
| 28.   | 13E112   | VENKATESH BI   | Malald R                         | JUST P           | -4-           | R. Kishmony  |
| 29.   | 13E113   | VENKATESH R.   | Riverwipisya                     | R. V. Whapiya    | Ryunnypiya    | T. Ground  |
| 30,   | 13E117   | VISHNU PRIYA R.  | J. Crowsu                        | J. Growsil       | J. Geows      | 0.0000   |
| 31,   | 13E122   | GOWRI J.   | 0 11                             | Sout             | ams           | Churt  |
| 32.   | 13E135   | SITHANTH BAGATH  | during.                          | Ch T             | 1             | a disand Hager   |
| 27.404  |  | SINGH S.P.   | Johnson & CP                     | 4 D. Liman       | D. Homen Bo   | D. Ac  |
| 33.   | 13E136   | SIVANANDA BALAJI D.  | 3.90                             | 1                | , /           |  |
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