

Annexure 1: Design Credit Project Details Semester 5st AY 2022-23

1. Student Name: Nikhil Gangwar
2. Roll Number: B20ME049
3. Department: Mechanical Engineering
4. The total number of design credits completed so far: 2
5. Course number of design courses completed so far: MEN1010
6. Total category-wise design credits earned so far (e.g., 2 credits in Category 1, 2 credits in Category 2, etc.):
2 credits in Category 1
7. Course Code of Design course opting in the coming semester (e.g., YYN1010):
MEN2020
8. Category No. for the proposed design course (From the table given below): 3

| Category | Activities |
|----------|--------------------------------------------------------------------------------------------------------------------------|
| 1 | Co-curricular projects such as Robocon, SAE-mini-Baja, etc., as a part of the Board of Co curricular activities of ACAC. |
| 2 | Internships with Academia/ Industry/ R&D organisation |
| 3 | Summer/Winter/Semester projects with Institute faculty within or outside the department |
| 4 | Summer Research Projects with faculty members within or outside the department |
| 5 | Specialised Elective Courses related to Design and Practical Experience |
| 6 | Regular Courses with optional Design and Practical Experience Component |

9. Title of the Project/Internship: Modulation of Variable Transformer using Arduino for constant Power Output
10. Supervisor/Mentor Name: Dr. S Mukhopadhyay
11. Deliverables:
 - Designed the whole setup using Solidworks software .
 - Written code for motor drivers, zmpt101b-voltage sensor, ACS71211 current sensor.
 - Manufactured a stand so whole system can work smoothly : notching, grinding, cutting, drilling, sheet metal work.
 - Made a remote for the to provide constant voltage to variac .
12. Is the mentor outside the institute? Yes/No: No
 - a) If yes, mention the name of the organisation:
 - b) The mentors from the outside campus must be available for evaluation during the presentation. Consent of the mentor from outside the campus:

I agree to be present (online/offline) during the presentation of the student for evaluation.

Nikhil
Gangwar

Signature of Student

S Mukhopadhyay

Signature of Supervisor/Mentor