# M.Sc. (Data Science): Final Semester Industry Internship/ Research Project Guidelines

# Effective from AY 2021 - 2022

Addendum to Academic Requirements for the M.Sc. (DS) Program (Effective from Autumn 2020-21) document issued by the Institute



# Guidelines for M.Sc. (Data Science) Final Semester Research Project / Industry Internship

The students admitted in MSc DS program have to undertake Research Projects / Industry Internships (**PC610**) in final semester for a **period of 13-16 weeks**. Projects/ internships will be graded as **Pass/Fail** based on the students' performance.

Projects/ internships can be done in two modes: **On-campus** and **Off-campus**.

### On-campus Project: Under the supervision of a faculty member at DA-IICT.

Students should identify faculty mentors and explore project opportunities based on their research interests. The semester-long project can be on any topic (in the areas of Engineering, Computational, Natural or Social Sciences) where the Data Science skills acquired by the students during the first three semesters can be applied to solve a Data Driven/ Data Science problem.

Note: Student will be permitted to register maximum one course along with the project if the CPI of the student is less than 6.0 OR the student has a backlog of his/her course work.

# \* Off-campus: Industry internship or project under the supervision of a faculty member at a reputed academic/research organization

For off-campus projects, students need to identify an on-campus mentor before the start of the project. Students can request any faculty member to be her/his on-campus faculty mentor. By-default, M.Sc.-DS coordinator will be the on-campus faculty member.

- 1. If the student receives the industry internship **through the institute placement office**, then all matters/communications related to the internship will be handled by the placement office till the start of the project. If a student requires any NOC before the start of such internship, the student can place her/his request to the placement office and such NOC will be provided by the placement office.
- 2. Once the project starts, for evaluation purpose, student will provide the internship details, information about the company, and contact details of the industry mentor to the on-campus mentor.
- 3. If the student decides to arrange and pursue an industry internship/ research project without the help of placemen-office, student has to submit the offer letter, details of the work to be done, and details about the off-campus industry mentor/ research project supervisor to the M.Sc.-DS coordinator. The information will be reviewed and if found relevant/ satisfactory, permission will be granted, otherwise student has to search for another option (or other work options in consultation the with industry mentor/ research project

supervisor). If a student requires any NOC before the start of such internship/ research project, the student can place her/his request to the M.Sc.-DS program co-ordinator. Program co-ordinator will review the request and forward it to the placement office for the issuance of NOC and it will be provided by the placement office. The placement office of the institute will keep all records of off-campus internship details.

Note: Student will NOT be permitted to register any course along with the off-campus internship/project.

#### **Evaluation:**

Internship/ project work should fall in the broad area of Data Science (AI & ML, Data Analysis, Statistics, Mathematics, Modeling and Prediction, Computer Science, Analytics, Informatics, Data Mining, IT, Data pipeline infrastructure, Data lake architecture and Domain knowledge based projects). The evaluation will be done on the basis of following parameters.

- Complexity of Problem and the Scale of the Work
- Novelty of the work
- Data Science Skills learned/ used
- Quality of Solution/Deliverables/ Results
- Any innovative contribution

The evaluation will consist of two parts:

**Part -1**: For off-campus Projects, project/research Supervisor (on-site) forwards his/her recommended score for the student's performance to the on-campus mentor. For on-campus projects, project mentor will recommend the score.

**Part - 2**: After the completion of internships, students have to present their works (in the form of presentation) in front of the panel of faculty members formed by the MSc DS coordinator and approved by Dean AP and PG convener.

The following documents will be taken into account for the evaluation:

- 1. Student presentation of the internship work.
- 2. Project reports. [Appendix: Section-A]
- 3. Feedback from project/internship supervisor. [Appendix: Section-B]

The final grade is determined by the scores received from the on-campus mentor (part-1) and student's performance in front of the evaluation panel (part-2). Finally, the Grades will be uploaded in the E-campus.

DA-IICT, Gandhinagar 29/11/2021

## **Appendix**

- **A. Project Report:** The recommended format to prepare the project report is as follows:
  - 1. Introduction (problem statement)
  - 2. Block Diagram showing the structure and flow of the project
  - 3. Detailed Methodology/ Implementation / Techniques /Tools used.
  - 4. Case Studies/ use cases that have been addressed.
  - 5. Key contribution. Results and Discussion.
  - 6. A Github link of the project (wherever applicable).

### **B.** Supervisor feedback

The feedback is collected on following parameters from both on and off campus supervisors on the scale of 0 to 10 (the sample feedback form is attached below for reference)

- 1. Sincerity and Diligence
- 2. Competency
- 3. Ability to take challenges
- 4. Proactivity/ Proactiveness
- 5. Quality of Work Produced
- 6. Quantity of Work Produced
- 7. Documentation Work

### Sample Feedback Form

Date:/	
Organization Name and Address:	
Name and Email Address of on-site supervisor:	
Student ID:	
Student Name:	
Date of Joining:/	Date of Leaving://-

Project on which the intern was working: 3-4 Lines details regarding project

Feedback about performance of the Student (Please grade them on the scale of 10 on following parameters)

Sr. No.	Parameter	Grade out of 10	Remarks
1	Sincerity and Diligence		
2	Competency		
3	Ability to take challenges		
4	Proactivity/ Proactiveness		
5	Quality of Work Produced		
6	Quantity of Work Produced		
7	Documentation Work		

Knowledge / Skill that you expect our student to know and whether the student stood up to the expectations:

Any other Comments/ Suggestion/Feedback: -