

**NU402: Industry Practice Course**

**Course Handout**

Internship Practice Duration 26weeks

**ProcessFlow:**

1. Student is Assigned Off Campus Faculty, Faculty Mentor and Industry Mentor from an Industry Practice Organization (IPO)
2. Student reports to the IPO: on January 06, 2020 or as per the information by CIC
3. Student is assigned an Industry Mentor at the Organization.
4. Work is assigned to student by IPO.

**Evaluation:** The Industry Practice Evaluation will be based on the following components:

* Know Your Organization
* WorkPlan
* Technical Progress
* Group Discussion
* Seminar
* Mentor Report
* End Semester Report
* Daily Diary

The following weightage has been assigned to each component:

**Instruments of evaluation and evaluation parameters:**

A. Daily Diary 10%

B. Other work elements as per following table 90%

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Evaluation Instruments🡒** | **Know your Organization (10%)** | **Work Plan (10%)** | **Technical Progress Report (10%)** | **Group Discussion (10%)** | **Seminar (10%)** | **Mentor’s Reports (20%)** | **End-Semester Report (20%)** |
| **Evaluation Parameters🡓** |  |  |  |  |  |  |  |
| **I. Professional** |  |  |  |  |  |  |  |
| 1. Planning ability | - | Y | Y | - | Y | Y | - |
| 2. Analytical ability | - | Y | Y | Y | Y | Y | Y |
| 3. Problem solving ability (creativity/originality) | - | - | Y | Y | Y | Y | Y |
| 4. Quality of technical work | - | - | Y | - | Y | Y | Y |
| 5. Ability to meet deadlines | - | - | Y | - |  | Y | Y |
| 6. Communication skill (Written and Verbal) | Y | Y | Y | Y | Y | Y | Y |
| 7. Consideration to Cost effectiveness | - | - | Y | - | Y | - | Y |
| 8. Customer focus | - | - | Y | - | Y | Y | Y |
| **II. Personal** |  |  | - | - |  |  |  |
| 9. Team-work | - | Y | - | Y | Y | Y | - |
| 10. Initiative | - | Y | - | Y | Y | Y | - |
| 11. Level of confidence | - | - | - | Y | Y | Y | - |
| 12. Integrity (Ethical) | Y | - | - | - | - | Y | - |

**Evaluation Schedule**

|  |  |  |
| --- | --- | --- |
| **When held** | **Evaluationinstrument** | **%marks** |
| Endof2ndweek | Know Your Organization | 10 |
| Endof4thweek | Work plan | 10 |
| Endof 10th week | TechnicalProgress Report | 10 |
| End of 12th week | GD | 10 |
| End of 22ndweek | Seminar | 10 |
| Endof 24thweek | EndsemesterReport | 20 |
| Endof12th and 24thweek | Mentor’sReports | 10 each |
| Daily Diary (to be updated weekly) | Daily Diary | 10 (for the entire IP semester) |

**Know Your Organization**

(Submission at the end of 2nd week)

1. Company/Organization’s head officelocated?

2.Company establishment year in India?

3.Head/CEO of your company?

4.Mission & Vision of your company?

5.Core Values of your company?

6.What are the main trust areas of your company?

7.Explain organizational hierarchy of your organization?

8.Briefly describe about the core areas of work of your company?

9.Name 4 important clients/products of yourcompany?

**Note:**

**Deadline** : Two weeks after the start of your project. **Weightage** : 10%

**Submission** :Upload on NUcleus.

Do not divulge any confidential any confidential information of your IPO

**Work Plan**

(Submission at the end of 4th week)

Name of Intern:

The Work Plan should have the following details:

1. Project Title
2. Objectives
3. Analysis of the problem: Describe the major problems that the project will need to tackle, as you understand them. Identify the bottlenecks, and (if possible) describe how you will tackle them.
4. ProjectPlan

Based on the objectives, the plan should discuss the strategy proposed to be adopted and the methodology of implementation.

The objectives and the project plan should set clear goals based on measurable outcome. Follow the guidelines given below. The same guidelines (SMART goal setting) will also be used as evaluation metric for your work plan.

|  |  |  |
| --- | --- | --- |
| **Step** | **Mnemonic** | **Description** |
|  | Specific | Which, What, Where, Who, Why |
|  | Measurable | Howmuch, Howmany |
|  | Action Oriented | Describe thetarget or result you want to achieve |
|  | Realistic& Relevant | Howit relates to individual/business/institutegoal |
|  | TimeBases | By when. For example, technical progress notesaredueat the endof10thweek. Seminar are to be organizedat end of 22nd week. |

1. Project Deliverables: A brief description of the Primary and Secondary project outcomes. Primary outcomes are the planned/necessary/high-priority outcomes. Secondary outcomes (if necessary )may include potential/good-to-have/low-priority outcomes.
2. TimeLine of important major milestones along with target dates (Enclose a PERT Chart here)

Timeline 🡒 Week 2 4 10 12 22 24

Activity/Deliverables

↓

1. Relevant Skills desired

List the skills that you have already acquired (either at NU, or elsewhere) which appear to be relevant for the project at hand. If necessary, categorize into Primary and Secondary skills.

1. Skills toLearn

List the skills that you have identified as necessary to acquire in order to complete the project. Categorize into Primary and Secondary skills if needed. State how you will go about acquiring these skills, and your deadlines for the same.

**Note:**

**Deadline** : Four weeks after thestart ofyourproject. **Weightage** : 10%

**Submission** : Upload on NUcleus.

* Do not divulge any confidential information of your IPO.
* As work plan will evolve as the IP progresses, students are advised to add any additional responsibility/assignments to the original work plan from time to time.

**Technical Progress Note**

(Submission at the end of 10th week)

Period From\_\_\_\_\_\_\_\_\_\_\_\_\_To\_\_\_\_\_\_\_\_\_\_\_\_\_(dd/mm/yy)

Name of Intern :

Name of Industry Mentor:

It is a briefreport to summarize theprogress ofstudents’ technical contributionsinthe organization, and howit has matchedthe assignedtargets asmentioned inthework plan.

The report shouldcontain thefollowing:

* Objective,
* Task description andtaskresponsibility (vis-à-vis other team members).

Thereport musthave reference to thework plan and clearly highlightthe current stateoftheworkagainstwhatwas envisioned.

* Deviation from work plan, if any. If there has been any (un)predictable delay/interruption, its cause and consequence must be noted in the report.
* Mention the technical challenges andsolutionadopted to meetthe objectives.
* Outcomes (please ensure that you do not divulge any confidential information of your organization here):
* Describe the technical deliverable, your contribution as a member of the team, and how it matches to the objective/goal of the project as mentioned in your work plan.
* Any new solution/algorithm/analyses/process/product generated/ developed.
* Will your work result in external publication/patent?
* Please mention if you used any special tool/software/hardware.
* Describe any new skills that you picked up. How did you prepare yourself for this?

**Note:**

**Deadline :**Endof10thweek.

**Weightage :** 10%

**Submission :**UploadonNucleus

**Group Discussion (GD)**

(Schedule by the end of 12th week)

|  |  |
| --- | --- |
| **Evaluation Instruments** | **Group Discussion**  **(10%)** |
| **I. Professional** | |
| Analytical ability | Y |
| Problem solving ability | Y |
| Communication skill | Y |
| **II. Personal** | |
| Team-work | Y |
| Initiative | Y |
| Level of confidence | Y |

**Note:**

**Deadline :**Endof12thweek.

**Weightage :** 10%

**Submission :**In Person/Skype

**Mentor Report**

**Submission deadline:**(endof12th week, endof24thweek)

**NameoftheStudent:**

**Project Title:**

**InternandMentordetails** (to befilled in by theIntern):

**Intern’s Nameandemailid:**

**Mentor’sName/Organization:**

**MentorEvaluation(to befilledinby the Mentor)**

Please evaluate theNIIT University Internona scale of1 to5 as described

1 = Poor; 2 = Belowaverage; 3 = Average; 4 =Above average; 5 = Excellent

|  |  |  |
| --- | --- | --- |
| **Sl.No.** | **Evaluation Parameter** | **Evaluation** |
| 1. | Planning ability |  |
| 2. | Analytical ability |  |
| 3. | Problem solving (Creativity/Originality) |  |
| 4. | Quality of technical work |  |
| 5. | Ability to meet deadlines |  |
| 6. | Communication skill (Written & Oral) |  |
| 7. | Customer Focus |  |
| 8. | Team-work |  |
| 9. | Initiative |  |
| 10. | Level of confidence |  |
| 11. | Ethical integrity |  |

Please briefly describe how this intern is an asset to your organization. Please briefly describe ways in which this intern can improve further.

**NotetoMentor:** This document is CONFIDENTIAL and will not be shown to the Intern. Please emailthe completed report directlytotheOff-Campus Faculty.

**EndSemesterReport**

At the end of the Industry Practice period, the student will submit a report as a partial fulfillment to his Industry Practice Course requirements. The report will be treated as the last deliverable for the completion of the internship program and to be eligible for the final grade. The report is expected to clearly reflect the student’s activities during the internship period, viz a conglomeration of the planning, learning, intellectual, development, academic progress and scholarly achievements made during his period of his stay with the organization. The end semester report must include an outline of the business of the company, summarize the work done,and discuss any important and relevant aspects of the work. The endsemesterreport shall beintwo parts:

**Part-A(Technical):**

Donot divulge anyconfidentialinformationof your IPO

The end semester technical reports should consist of three main sections: the preliminary pages, the main body of the report, andthereferencematerialandappendix.

The preliminaries have to include:

* Title Page
* Acknowledgement
* Declaration by thestudent
* Endorsement(by Mentor& Institutional Instructor)
* Abstract / ExecutiveSummary
* Table ofContents / List ofFigures / List ofTables

The Title Page lists the report title, author’s name, mentor’s name, institutional instructor’s name internship organization, date, and the University name.

The Acknowledgement pages would contain any acknowledgement of assistance. Declaration by the student: It should contain an endorsement that the report has been written solely by the author and that it has not already received academic credit from another institution.

The endorsement should be by the Mentor and the Institutional Instructor that the work reported has been actually done by the candidate in the organization under their mentorship and supervision.

The executive summary is written after the main body of the report is written. The executive summary must be self-contained and should include all major points of the report body. It should give sufficient details so that a person with prior knowledge in the field gets a good understanding of the contributions described in the report from reading the executive summary only.

The Table of Contents lists all sections and sub-sections, page numbers and uses the same numbering system as the main body of the report. The List of Figures/Tables lists the figures/ tables indexes and page numbers.

**The main body of the report should include:**

* Introduction
* Body
* Discussion, ConclusionsandRecommendations

The Introduction clearly defines the objective of the project, the problem definition and scope, literature review, theoutlineofthe company and/or department,andsummary of the work performedatthe company.Company Profileshouldincludeanoutline ofthe backgroundandspecificbusiness ofthe company and/or department inwhichthe internshipworkwas performed; relevant operational figures ofthe company (numberof employees, organizational structure, industry trendetc.).

TheReport Body is thedescriptivepart ofthe report. Itshouldcontaintheobjectives, analysis oftheproblem, methodology, findingsandinterpretationarecoveredinthemain body ofthe report.

The methodology should outline of the work that has been performed in the company: a description of the given and performed technical activities and relevant results/outcomes. Themost important technical results should beindicatedinthe report along with identificationoftheoperational /technical processes, and howthe result impacts the performance/behavior oftheothermodules / whole system. Thestudent shouldalso emphasizeoncustomer focus/cost-effectiveness andbusiness impact ofthe work done. The student should highlight his/her contribution andsignificanceof his/herwork performed during theinternshipperiod.

Discussions, ConclusionsandRecommendationsaremerely derived fromthemain body of the report and do notintroduceany newsubject orconcept. Theconclusionusually restates the problemstatement as givenintheintroduction andthenrefers to themethod/ solution /finding/ analyses as given inthe report body. Recommendations andFuture Scopeareproposed plans ofactionfor thefuture.

TheReferencemay includelists ofall books, journals, webpages, articles which are specifically referredinthe report. References have to includelinksto any informationthat is coming fromanexternal source. The referenceshould followa consistent style as per establishedguidelinesofIEEE

Appendix: Informationthatis not essential to explainthefindings or tothedevelopment of the theme, but thatsupports theanalysis (especially repetitive orlengthy information), validates conclusions, justify statements orpursues a related point should be placedinan appendix.Examples ofinformationthat could beincludedinanappendix include figures/tables/charts/graphs ofresults, statistics, questionnaires, transcripts ofinterviews, pictures, lengthy derivations ofequations, maps, drawings, letters, specificationordata sheets, computerprograminformation, organizationchart, publicly available information about theorganizationetc.

**Part-B (Non-Technical):**

Industry Practice is not only an opportunity for developing technical skills and experiences, but also help in improving personality, and soft skills. The student must do a self- analysis on what were the areas where he/she gained the most, and where did he/she require to improve or where was he/she behindthe necessary level? Students are encouraged to use an ecdotes from their experiences in the organization and day today activities during the internship period.

A discussionofspecific technicalissuesrelatingto thestudent’scourseofstudyat NIIT Universityis desiredinthe report. The purpose isto helpthe student developcritical thinking and analytical abilities in relating academic knowledge to practical experiences.The relevant questionstoanswer inthis sectionare: what were themost usefulsubjectstaughtatNIITUniversity foryour internship?Whatwere themissing skills that theUniversity shouldfocus on?

**Note**

**Deadline:** Endof24thweek.

**Weightage:** 20%

**Submission:** Upload on Nucleus/Hardcopy for library

**Leave Policy:**

The following policy will be applicable when a student absence exceeds 5 days during IP:

1. S/he will need to work for 6 days a week (on Saturdays, assuming Saturday is a holiday for the IP organization. If not, go to no 2 below). If this does not compensate for no of days of absence,
2. Extend the last date of her/his IP by no of required days (as long as it does not encroach into the next semester by more than 14 days) after due approval from IP Organization.

If both the above measures together do not compensate for no of days of absence:

There must be serious reason for such long absence. In such case, her/ his IP registration may have to be cancelled and s/he will do the IP again. University may consider giving the benefit of waiver on University fee for the repeated IP semester.

In case of unilateral abandonment, the registration to IP semester will stand cancelled.

3. Advancement of IP end date is not permissible.

4. No breaks in IP is permissible without prior approval of the CIC.

5. IP student handbook will be shared by CIC at the beginning of IP which has to be sacrosanct read, understood and followed.

Note:

* 5 days of leave through the entire duration of IP Semester
* It is mandatory that a student reports to her/ his IP station on the date of start & date of end as communicated by CIC. Delayed joining will require prior approval from CIC. A student has to put in the requisite no of days in her/ his IP. Late joining will lead to late completion.

**Grading Policy:** Total marks obtained will be converted into relative grade at the end of IP Semester. Please note that IP cannot be repeated. If the student absents himself from the assigned IPO without prior permission of the Head, CIC or does not follow the discipline/ rules of the IPO, or suffers from genuine and serious health problem as evinced from documentary evidence, s/he is liable to get her/ his IP registration cancelled by the University.

**Make-up Policy:** Any failure to adhere to declared schedule of evaluation can result in loss opportunity to take the evaluation. However, the student can request for extension of time to the Off-0Campus Faculty and if the extension is granted, the student will be able to submit the evaluation component after the scheduled date.

**Important to know:**

If IP registration of the student is cancelled by the University for any of the reasons mentioned above, student must stop attending the work at IPO with immediate effect. If s/he continues to attend the work at IPO, s/he will face a disciplinary action by the University for unauthorized presence at IPO.