

2.2.5. Initiatives related to industry internship/summer training

Evaluation of Industrial Internship

Marks awarded by Internship Coordinator & HOD/HOD Nominee based on the Progress of the project evaluated periodically (2 times) – 30 Marks + 20 Marks Consolidated marks list is signed by the industrial Internship Coordinator. Final Marks are entered by Industrial internship coordinator.

Internship Coordinator & HOD/HOD Nominee will conduct the Examination.

Internships: The students are encouraged to take up intern ship programs during their semester break. Faculty members give their guidelines, suggestions and scope and contact details of an internship. They also help the students by interacting with the industrial experts, provide the students recommendation letters and other necessary supports. The alumni coordinator constantly interacts with alumni those who are working in the industries and request them to provide necessary guide lines and supports for their junior's internship.

- i. Summer training is a compulsory credit course to be completed in the summers after I and II years. The duration after I year is 30 days and the duration after II year is 40 days.
- ii. Some of the industries / Institutes where the students regularly go for summer training include but are not limited to BHEL, Torrent Power, UPPCL, IIT Delhi, ADRDE, Kirloskar, DEI USIC etc.
- iii. After the Third Year, the students go for a 5 month Co-op Internship to various Industries. The duration is long enough for them to be given some live project work and most industries do take advantage. Many students also get some monetary incentives for the training period going upto Rs 25,000 per month. Some industries offer free boarding and / or lodging.
- iv. Some of the industries where the students regularly go for co-op internship include Analog Devices, Texas Instruments, Essar Steel, Maruti, IIT Delhi, Cadence Design Systems, start-ups in Bangalore / NOIDA etc.

Implementation details:

- i. The Department has a strong Alumni Network across the country. The Alumni not only help arranging for the Co-op Internships but also mentor the students in their internship. The Placement cell coordinates this effort and ensures that every student gets the summer training / co-op internship opportunity in some industry / educational / R&D Institution.
- ii. Training sessions are conducted in DEI by the Alumni before the students go for their Internship on the dos and donts during the Internship.
- iii. The Alumni mentors also mentor the students during the Internship so that they get the maximum benefit by working on live projects.
- iv. Faculty members are assigned students that they have to evaluate according to the geographical spread of the industries. The industries are clustered into clusters based on the geographical location and one cluster is assigned to one Faculty member.

Faculty members coordinate with the Industry personnel mentoring the students in their internship and get feedback on their performance through telephone / email interaction on a regular basis. This enables mid-course correction in case some student has some performance issues. They may also visit the industries where the students are in their internship and get first hand feedback.

- v. Students are required to submit a report of the work done during their Summer training / co-op internship when they come back to the Institute after the completion of these endeavours. They need to make a presentation to a Departmental committee that is set up for the purpose and face a Viva examination.
- vi. There is an external end semester examination also where the external examiner who is typically an Industry person evaluates their performance. These evaluations ensure that the training / coop Internships are taken up very seriously by the students.

Impact Analysis

- i. The industry exposure helps a lot in personality development of the students. For many students it is their first experience of staying away from home on their own. They learn to do manage. They are also exposed to industry culture and learnt to communicate with their industry mentors and perform tasks assigned within the given time frame in an industrial setting. The change in their personality is evident when they come back from the industry. They are more confident and more articulate.
- ii. Many students, who perform well, get Placement offers from the industry where they do their coop internship. In some cases there is a request that the student be allowed to join the industry earlier than the May of next year when they complete their graduation. Requisite arrangements are made in such cases to enable the student to complete the remaining credits through online mode and come to the Department for appearing in the tests / exams. In some cases these are arranged in the DEI local centres in the city where the student works.
- iii. One big advantage that the industry gets in offering the co-op training is that they get to observe the student for a considerable period i.e. 5 months and can evaluate their strengths / weaknesses better. In case they offer placement they can also ask the student to work on the weaknesses identified in their Final Year so that they are ready to be productive from day one when they join the industry after Graduation. This has been a very successful model in many cases.
- iv. Some students get their Final Year Major project ideas from their co-op training. They continue to be in touch with their industry mentor and many work on the project under their joint supervision. This is permitted by the Department.
- v. Some students work on projects that are industry sponsored and get paid for the work done in the Final Year major project. These incentives help raise the quality of the work done.

Training, counselling and placement is offered to every graduating student for her to be confident and competitive in her choice of career and for inculcating entrepreneurial skills.

Students of the institution are employed in Financial Institutions, educational institutions, IT companies, automobile industries, central and state government services, textiles industries and core engineering industries. During their course of study a five month Cooperative Education programme is made compulsory. Co-operative education is a structured method of combining classroom-based education with practical work experience in the industry. It entails cooperation between Institute and Industry to produce trained professionals. DEI is collaborating with University of Waterloo (a global leader in the Co-op education model) and has launched its own Co-op model in 2013, suitably adapted to Indian conditions. The model aims at development of 'employability skills' through the introduction of a 6 month industry stint as part of the course requirement.

Indian Industry has lately been very concerned with the lack of requisite technical and soft skills of students entering industry. The recent 'National Employability report' claims that 47% of graduates across India are unemployable for any job¹. The time and cost of training students after education is becoming a major challenge for industry. Three key reasons why DEI has launched the Co-op model are:

- Global practices
- Need expressed by industry in various interactions and forums in the past
- Need for reducing high rates of attrition amongst fresh graduates due to mismatch in culture and expectations

The Co-op model was launched by DEI in 2013 for its Engineering and MBA programmes. 100% of the students were placed within 5 months of the launch of the programme. The feedback from the first set of returning students has been excellent. 80% of companies paid stipend or provided some non-financial support.

While the cost of recruiting, training and developing a fresh graduate can be upwards of one year's salary, most fresh graduates leave the organisation within 2 years due to non-fitment with culture and working environment. The Co-op model allows organisations to observe the candidate closely for an extended period of time thus allowing a deeper understanding of the competencies and fit of the student. The students bring fresh ideas and perspectives to the organisation and they can be assigned routine duties or special projects. Students on the other hand gain immensely through an extended on-the-job understanding of how academic principles are applied in real situations and an opportunity to test the skills learnt in the classroom. The interaction and feedback from re-turning students and participating organisations allows the University to enhance and improve its curriculum. With a deeper

understanding of the industry, which grows with each passing year, the faculty are able to relate practice to theory better.

Summer Training process is of a short duration and primarily aimed towards exposing students to industry practices. By the time students learn about the organisation and its processes, the training period is close to completion. Co-op model on the other hand is a partnership between the industry and the institute. Assignments (routine as well as special) are given with a view to

let the student face real situations with intensive supervision by the project guide and supported by the faculty of the institute. The longer period also allows the organisation to understand the personality and motivation of the student and use this information at the time of recruitment. The stipend or some other non-financial support provided by the organisation helps motivate the trainee to deliver his or her best performance and industry also gets involved in overseeing the trainee's work. A request letter in the following format is sent to the industries for training.



DAYALBAGH EDUCATIONAL INSTITUTE
(Deemed University)
DAYALBAGH, AGRA – 282005, U.P., INDIA
Phone: (0562)-2801545; Fax: (0562)-2801226
Web: <http://www.dei.ac.in/>

To,
2018
Manager (HR),
Cadence Design Systems
NOIDA

January 20,

Dear Sir/Madam,

Greetings from Dayalbagh Educational Institute!

DEI is a Deemed University located in Dayalbagh, Agra, well known for its academic ascendancy and extramural excellence. DEI has been accredited by the National Assessment and Accreditation Council (NAAC) and has been awarded an 'A' grade in October 2013. In 2009, a Committee set up by the Ministry of Human Resource Development (MHRD) under Professor P.N.Tandon placed DEI in 'A' category, third in rank and 8th among all 130 Deemed Universities under review. Recent overall NIRF ranking of the Institute is 63 and the All India NIRF Ranking of the DEI Faculty of Engineering is 69.

From the year 2013, the DEI Faculty of Engineering introduced a compulsory 5-month Co-operative Education Internship Program for B.Tech. students after completion of their 6th semester of study. This unique internship program is one of very few such available in the country that offers a structured method of combining classroom-based education with practical work experience in the industry. It entails cooperation between Institute and Industry to produce trained professionals to meet current industry needs/skills. You will be happy to note that this initiative has been very well received by industry and over 60 companies / institutions have already participated in the program.

A brief introduction to the Co-operative Program (Co-op Program) is attached along with this email for your kind perusal. For B.Tech. students, the program is scheduled to run from April 01, 2019 till August 31, 2019.

Towards this end, we earnestly solicit your help and support by accommodating some of our B.Tech. (Electrical) students for the Co-op internship training in your esteemed organization as was being done in the past. I am enclosing the CVs of the following students who wish to undergo internship in your esteemed organization.

1. _____

I request you to kindly provide necessary facilities for the same at your works. The students may be allotted focused projects for the benefit of your organization under the joint supervision of an expert from your organization as well as faculty from our institute. We eagerly await your response to this email so that we can take the Co-op Program forward.

Thanking you and looking forward to hearing from you,
Sincerely,
Internship Coordinator

Sample Certificates

https://www.dei.ac.in/dei/files/NAAC/Criterion1/Internship%20Certificates/Internship%20Certificates%20B.Tech_Electrical%20I,%20II,%20III%20and%20IV%20year.pdf