



UNIVERSITY WITH A PURPOSE

Students across the schools, throughout their learning period at UPES, are assessed and supported through an internal process unique to the University. It is equally unique in the way it leaves a compelling impact on the student, industry and parents. The process is based on the four pillars of student's progression, namely, '**Identification of Current Competence**', '**Allocation of Mentor**', '**Preparation of improvement Plan by the Mentor**' and '**Monitoring of Progress and Reporting**' and then are assessed through appropriate continuous and summative evaluation to provide necessary support for both advanced and slow learners.

It outlines assessment of a students' learning levels in 2 distinct stages:

Stage-1: Know Your Student (KYS) - Immediately after admission of the student department arrives at the major strengths and weaknesses of the student by:

- a) **Analysis of 12+ scores as the students enter the different programs**
- b) UPES assesses student's learning levels through its **aptitude-based tests**. Thereafter, it facilitates the student's induction into their respective programs.
- c) Academic requirements are analysed based on **regional distribution**. For example, students from some regions lack communication and soft skills.
- d) This data is used to give inputs for **bridge courses**- Bridge courses are conducted to ensure a smooth transition e.g. mathematics and physics.

Case in focus

School of Engineering, conducts **bridge course** in physics, chemistry, and mathematics, with an aim to refresh students before commencement of the academic session. School of Business also conducts a short and **intensive bridge course of 6 days** on subjects like Economics, Accounting, and Business Communication. (**Annexure 1**)

School of Business conducts a **2-week induction program** called **M-Cube (Monsoon Management Magic)** for the students. The objective of this program is to educate incoming students about business and society, aspects of culture, and local community needs. In the past, the school has invited speakers from different facets of society such as successful business entrepreneurs, social activists, and social entrepreneurs. There are social and industrial visits for the students, along with regular introductory classes in basic mathematics, economics, statistics, Excel, online learning, and case studies. (**Annexure 2**)

School of Law- To prepare the new students at the School of Law for an understanding of legal studies, a course on '**legal methods and legal reasoning**' is delivered across all law programs. This structured course helps students grasp the **fundamentals of learning the law**.

- e) **Personality Enhancement Program**- Individual requirements regarding soft skills, behavioural traits, etc., are analysed and addressed through soft skills training programs like Personality Enhancement Program (conducted by external agency Dale Carnegie). (**Annexure 3**)

- f) **Mentors-** Department nominates Mentor to the student based on student's profile who also prepares a plan of students' induction /imparting a bridge course or conducting extra classes. (**Annexure 4**)
- g) **Clinical psychologist-**In addition, a full time **clinical psychologist** appointed by the University to support and counsel the students on various issues. (**Annexure 5**)

Stage-2: Bridging Competency Gaps (BCG) - After every Mid Semester and End term Examinations

- a) **It entails identifying strength and weaknesses in various subjects-** The assessment plan for students in every course at UPES comprises of two evaluation schemes: continuous evaluation and summative evaluation. Within continuous evaluation, class tests are conducted for the students, which serve as a parameter to discern the learning pace of the students. Every faculty individually meets the students with their graded test-sheets and advises slow and advanced learners accordingly. As a mechanism of continuous support system, once the academic session starts, the slow learners are first identified by course teacher through pre mid-term test and counselled, and later formally identified as those who score less than 40% in mid-term examinations. (**Annexure 6**)
- b) **Differential Support for slow learners**
- Regular information on attendance and academic performance of students to parents regularly. (**Annexure 7**)
 - Remedial courses for first year programs for courses which students have found difficulty in understanding – applied mechanics, engineering mathematics, Economics and many more. Critical topics are re-explained for better understanding by the students.
 - Learning material prepared by subject in charge is uploaded in the portal regularly for student's reference.
 - Video lectures developed and uploaded on Learning Management System (Blackboard) for future reference for students.
 - Department conducts remedial classes, mentoring and summer term.
 - To **save the year**, failed students are allowed to appear in a supplementary test.

School of Computer Science and Engineering- One of the initiatives under School of Computer Science and Engineering, 'Nayi Disha – A Reformative Learning Program for Academically Deficient Students'. The program has been successful in last two academic sessions (Jan-Jun, 2019) and (Jul-Dec, 2019) for 1st and 2nd year students for three core-subjects. In Jan-Jun 2019, a total of 92 students took benefit of this program, and overall performance improved by 33%. In Jul-Dec 2019, a total of 111 students got benefited and overall performance improved by 47%. Administratively there are faculty members designated as overall coordinator to manage the program smoothly, over the semesters, to ensure proper conduction and formal documentation. (**Annexure 8**)

Differential Support for advanced learners

- High performing students are identified on the basis of internal assessment, university examination and involvement in classroom.
- Students are encouraged to be members of professional bodies and chapters across different schools and supported to represent University at different forums.

- Students participate in group discussions, technical quizzes to develop analytical and problem-solving abilities.
- Fast learners meet is conducted to seek feedback on the curriculum. They are part of Department Consultative Committee.
- Research initiative for students of engineering (RISE) support to students for their projects. (**Annexure 9**)
- University provides scholarships to the bright students based on the policy <https://www.upes.ac.in/admissions/scholarship>.
- Advanced learners are given opportunity of semester exchange program and foreign internship.
- Bright students are encouraged to participate in national and international conferences / workshops /competitions. Our students performed very well in some of the national and international competitions, like ocean plug-in, map your way, SAE Aero Design, NACDEC 2. The Aeronautical Society of India, BAJA, FMAE BAJA, EFFI-CYCLE, GO-KART etc.
- Various club activities are conducted by all the departments in the respective areas to mould the students in corresponding field.
- NPTEL session is conducted for all the subject for tough topics.
- Advanced learners are provided with scope to write academic papers while getting exemptions on their assignments or project work.

School of Health Science- On the basis of low attendance (less than 60%), sessional marks (less than 50%), class tests (less than 50%), assignments, class response, students are classified as slow learners and those performing consistently in the classroom and lab are classified as fast learners for each subject. The aim is to level up the students who are lagging behind in regular theory and practical classes on the other hand those who are excellent performers in class are made to learn new concepts and are involved in research related activities.

For slow learners special classes are scheduled in the morning (before 9 am) and evening (after 5 pm) to emphasize and reinforce the important concepts for slow learners. To understand the outcome level attained from what has been delivered, an assessment test is conducted after the extra classes. Creation of student teams which include fast learner that can help to solve the grass root problems and encourage peer learning and team spirit. Students learn more when they perform practical and hence, focus is done on sessions for learning experimental techniques in which slow learners are encouraged to perform experiments which are directly related to theoretical concepts.

Reports of internal marks, class attendance are sent to parents of these students so as to inform them about the academic status of their ward. Parents are timely suggested to motivate students to attend classes on regular basis and to become more participative in class activities (Quizzes etc). Mentor-mentee interactions are done after every 3-4 weeks to get regular updates of student's academic status and co-curricular participations. Those who are consistently underperforming are counselled by concerned faculty members and subsequent efforts are made to resolve the problems faced by the student.

Students who are showing good interest and consistently performing well in the class tests/assignments/exams/activities are helped to learn more new concepts. Fast learners present on assigned topics in journal club summarizing and analysing the recent research or a contemporary topic thus further sharpening their skills and understanding of their areas of interest. This also enhances their analytical and communication skills.

These students are involved by faculties in research projects pertinent to their course. Some of the student in SOHS are working on "Increasing the yield of phytoconstituents of medicinal plants using aquaponics and hydroponic

system”. Some are working on optimizing process of green synthesis of nanoparticles and understanding mechanistic basis of it using HPLC and GC-MS. Students are encouraged to work on collaborative projects with students of other departments. Some of the students of SOHS are working with students of school of computer science.

An increase in attendance was observed for the slow learners. The performance of more than 50% students was increased in the end semester exams. Parents are in constant touch with the concerned faculty and are co-operating with the Schools’ policies on minimum acceptable attendance. Some fast learning students have worked on extra hours even in between their exam days and have produced quality results which are ready to be published in reputed international journal.

Other differential support

- a) A basket of electives is offered to students on emerging areas of specialization.
- b) Interdisciplinary courses offered to students to bridge cross discipline requirements
- c) Add on courses in emerging domains like Artificial Intelligence, Design thinking and to sharpen skill sets like team work, communication and soft skills etc.
- d) To enhance learning experience of the students a learning management system Blackboard is implemented. ‘Blackboard’ is the online environment where students and faculty connect to engage in teaching and learning, which provides following advantages:
 - Ask the instructor: instructor-student engagement using discussion forum
 - Class café: student-student interaction using discussion forum
 - Through one of the initiative of career service department (EDGE), students undergo various trainings on aptitude, communication, group discussion, mock interviews, and role-plays.**(Annexure 10)**

Employability boot camp by Career Services- Enhancing Employability of its students is of extreme importance to UPES. It encompasses host of training interventions like Aptitude Training, Domain Refresher, Technical Training, and Workshops on Resume writing, Portfolio management and a comprehensive three-day certification workshop **Executive Excellence Program** to build on the skills of group discussion and personal Interview in Collaboration with **Times Professional Learnings**. The entire program is designed on the framework of Self Awareness, Exploring Creativity and Critical Thinking to Clear and Confident Presentation in context of Employability. These opportunities not only build the skills and network for students that help them in their on-campus placement but also help them with skills that supports them throughout their life.