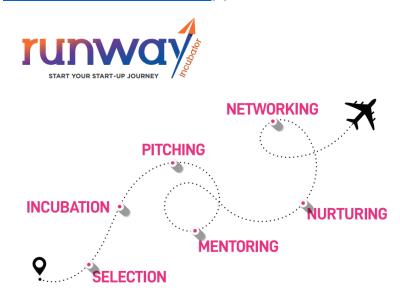
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1.4.1 Does your university as a body provide assistance in the local community assisting the start-up of sustainable businesses through relevant education or resources (e.g. mentorship programmes, training workshops, access to university facilities)?

### Runway Incubator

https://upes-production-cvb3e7frghdda0a4.z01.azurefd.net/drupal-data/2023-09/school-of-health-sciences-and-technology-2023.pdf [1]



We help start-ups convert their ideas into real and viable businesses.

Our goal is to help brilliant innovators get through the early stages of setting up a start-up and reach the point where they have made a product/service impressive enough to raise money. This will be done through a mix of mentorship, grants and investments, legal and incorporation support, and allocation of space to work.



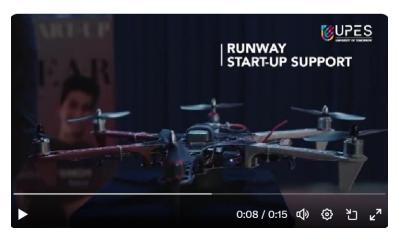
## Runway Start-up Incubator

https://twitter.com/UPESDehradun/status/1643209838317690881 [2]

With 120 start-ups pre-incubated & 37 receiving grants from #UPES, Runway - our start-up incubator helps ventures with an intensive program.

We support your ideas so you can say to the world, 'I am an innovator. I am Tomorrow'.

Visit: <a href="https://runwayincubator.com">https://runwayincubator.com</a>



### Runway Incubator

https://www.runwayincubator.com/about [3]

We work with start-ups on their ideas and help them transition into strong, scalable, and successful businesses

Our goal is to help brilliant innovators get through the early stages of setting a start-up and reach the point where they have made a product/service impressive enough to raise money. This will be done through a mix of mentorship, grants and investments, legal and incorporation support, and allocation of space to work.

Our team comprises entrepreneurs, investors and mentors and SMEs (subject matter experts) who are experts at building solutions that people want.

## Start your start-up journey

Runway is not a traditional classroom; it is an intense, mentor-driven incubation program designed for those who are keen to build their businesses. Throughout the program, start-ups will refine ideas and business models, develop prototypes, and identify key customers and investors.

Since its inception, Runway has worked with several start-ups from different sectors. They have gone on to create compelling products and made a difference to society.

### At Runway, we help your start-up take-off

Runway is an incubation initiative by the UPES Council for Innovation and Entrepreneurship (UCIE). UCIE has been established under the aegis of UPES and the Hydrocarbons Education & Research Society (HERS). It has been recognised by the Government of Uttarakhand as a business incubator and state nodal agency to encourage entrepreneurship and help incubate organisations in the state.



UPES Council for Innovation and Entrepreneurship (UCIE) has been incorporated as Section 8 company under the Companies Act 2013. It has been recognised by the Government of Uttarakhand as a business incubator and state nodal agency to encourage entrepreneurship and help incubate organisations in Uttarakhand with mentoring, providing flexible space and access to a network of resources, and other business services designed to accelerate their success, create jobs and revenue for the region.

UCIE is a member of the University Business Incubator (UBI) Global, an international platform, which connects corporations and governments with innovative thinkers and doers globally. This collaboration provides UCIE with a unique opportunity to understand, explore and visualize the state and impact of India's incubation ecosystem in a more efficient manner.

#### **Runway Team**

We have the expertise to help you build a great company. Check out the senior leadership on the team below.

#### Mentor

We have the expertise to help you build a great company. Check out the senior leadership on the team below.

### Startup Journey Support

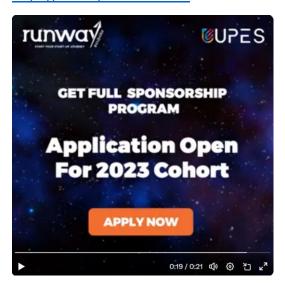
https://twitter.com/UPESDehradun/status/1625099083194028032 [4]

Are you an aspiring entrepreneur with a great idea but don't know where to start? UPES #RunwayIncubator is here to support your startup journey.

### #DoYourThing

Last date for applications - 15th Feb 2023

#### https://runwayincubator.com



### Scientific and Academic Career Development

https://www.linkedin.com/posts/school-of-health-sciences-technology\_day-3-of-the-workshop-activity-7153265262895513600-YHEy/?utm\_source=share&utm\_medium=member\_desktop\_





\*\*Over the past few days, we delved into a variety of topics aimed at empowering participants with valuable insights and skills to navigate the challenges of pursuing a successful career in the scientific and academic realms.

A heartfelt thank you to Aniruddha Chatterjee for being the driving force behind the success of the workshop. Your expertise and insights during the sessions were invaluable, leaving an indelible mark on all participants.

⊕A sincere acknowledgment of the active participation and thought-provoking questions from our esteemed attendees. Your commitment to academic advancement is truly commendable. ★

# <u>UPES faculty member develops mobile robot with combat support</u> <u>applications</u>

https://blog.upes.ac.in/upes-faculty-develops-mobile-robot-with-combat-support-applications/ [5]

#### PRADEEP JAGWAN · JANUARY 23, 2021

Dr. Abhishek Sharma, research scientist from the School of Engineering, has created mobile robots that can detect and trace the target or victim's location and position to prevent casualties in war and other terrorist attacks

Technological innovations impact all aspects of our world – from agriculture to transportation to how we communicate with each other. As an educational institution,



UPES has always focused on providing an environment that encourages innovation.

The latest in the long line-up of innovations at UPES are mobile robots created by Dr. Abhishek Sharma, a Research Scientist from the School of Engineering. He received a funding of INR 1 lakh from UPES for the project.

Abhishek was part of the rescue operation by mobile robots in disaster-prone areas using swarm intelligence techniques. He started working on the project while he was pursuing his Master's in Israel. The loss of human lives in the Mumbai terror attack and Uri made Abhishek work relentlessly on the robots and other prototypes that had defence applications.

Search and rescue operations were performed by the aerial and mobile robots. They used swarm intelligence optimisation techniques for correlation and communication between each other and the user mainframe. Aerial and mobile robots used thermal imaging cameras and sensors to detect and trace the target or victim's location and position and update the mainframe. These robots use path planning and path detection techniques to reach the victim and perform the rescue operation.

The total weight of the robot without any extra load of ammunition is one-and-a-half kilogram. The speed of the robot is ten-meter per second. Carbon fibre was the material used and for quick movement of the robot, the wheels were placed in an omni direction without any directional movements. The maximum time that the robot would take to identify the target would be 30 minutes. Also, the robot can be used in the beaten tracks or on multi-terrain floors.

When asked about this invention, Abhishek says, "I wanted to join the Indian Army and gave entrance examinations for the same. But destiny had other plans for me. Unable to join the Indian Army, I wanted to do something for the nation. Therefore, I decided to make technical prototypes beneficial for the defence sector."

Further adding to the intention behind this project, Abhishek said, "Indian Army had to depend on Israel for equipment and robots which were extremely expensive. I learnt a lot while I was in Israel working on many drone prototypes and mobile robots. Thereafter, I decided to make robots for my own country that can prevent the casualties in war and other terrorist attacks. It would be great if the Indian Army and scientists from Defence Research and Development Organisation (DRDO) could implement this."

Dr. Abhishek Sharma was recently bestowed with the Emerging Scientist Award 2021 for Engineering Science and Medicine. Adding to the list of his achievements, Abhishek has also published a book on Applied Soft Computing and Embedded System Application in Solar Energy (Mathematical Engineering, Manufacturing and Management Science).

Says he, "Young researchers should be determined and consistent, set high goals for themselves, never lose hope and get involved in a lot of research. They can also seek help from open-source platforms such as Robotics Worldwide."

"I would like to further develop similar robots with unique capacities such as aerial robots and marine robots to work in extreme circumstances in order to prevent disasters," he signs off.

## Runway Safari - Sunfox Technologies

Runway Incubator has launched a new program, Safari, to connect aspiring entrepreneurs with industry leaders. The inaugural Safari brought Cohort 3.0 together with Sunfox Technologies founder Rajat Jain. His entrepreneurial journey and insights provided valuable guidance to the participants. A visit to Sunfox Technologies offered firsthand exposure to a successful startup's operations. The Safari has ignited innovation and entrepreneurial spirit among the cohort. Runway Incubator plans

to continue organizing such interactions to empower its incubates and foster a thriving startup ecosystem.







## Mentoring Session on Design Thinking



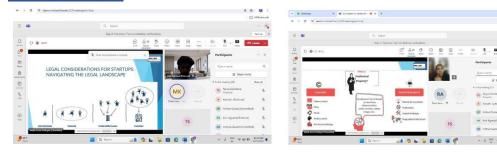
Dr. Ritam Dutta's session on Design Thinking highlighted its human-centric approach, emphasizing empathy, problem framing, and solution ideation. He discussed user-centric design, empathy mapping, and the importance of adopting a beginner's mindset. Key techniques like the What-How-Why method and reframing problems were explored to drive innovation and navigate disruptive technologies.

Mentoring Session on Attitude & Behavior Development



The session emphasized that a positive attitude is crucial for startup success, likening the entrepreneurial journey to an ECG's ups and downs. Key points included the importance of a growth mindset, continuous personal development, and resilience. Success depends on both strategic planning and the founders' adaptive mindset.

# Mentoring Session on Intellectual Property Rights (IPRs) and IP Management



Ms. Mitali Arora's session on Intellectual Property Rights (IPRs) covered legal requirements, entity registration, and IP protection. Key topics included trademarks, copyrights, patents, and trade secrets. She highlighted the importance of IP for market exclusivity and investment. The interactive Q&A session addressed participants' queries, offering practical strategies for safeguarding intellectual assets.

## Mentoring Session on Prototyping & MVP Development

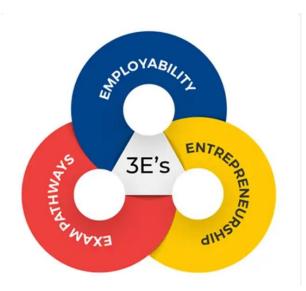
Mr. Durga Prasad's session covered the startup journey, emphasizing problem-solution fit, prototyping, and MVP development. He explained POC, Prototype, MVP stages, and Design Thinking's role in innovation. He detailed the iterative process of emphasizing, designing, ideating, prototyping, and testing. The Q&A session clarified doubts, empowering startups with valuable insights.





## <u>Training and Preparation</u> <a href="https://www.upes.ac.in/placements">https://www.upes.ac.in/placements</a> [7]

UPES believes in imparting skills that are high in demand and extremely important for a successful career. These soft skills will set you apart from the rest.



EDGE, a platform for limitless possibilities, is an acronym for Enhanced Development Growth and Enrichment program. EDGE supports students in their chosen field with a focus on key action areas, such as Entrepreneurship, Exam Pathways, and Employability. This exposes students to a wide array of activities that help them prepare for various competitive exams and excel professionally. Some added benefits of this program are focusing on enhanced reading, comprehending and analytical writing capability, developing critical reasoning analysis, and understanding analogies and their implementation. These skills help students transform into a specialised workforce with a more focused, holistic thought process and entrepreneurship skills. EDGE helps students stand out in a crowd.

#### Placement Process

Through insightful workshops, seminars and training programs, EDGE prepares students to face professional challenges; it nurtures students with comprehensive training. Additionally, EDGE gives students aptitude and comprehensive training, access to T.I.M.E center on campus, pre-post training assessment, pre-internship training, life skills training, graduate career guidance, thinking skills, communication workshops, resume workshops, LinkedIn profile workshops, personal branding and

pitching workshop, tech talks, mock interviews, employability boot camp, industry mentoring by alumni, counselling for competitive exams, E-cell for aspiring entrepreneurs and soft skills training.



# Incredible, but true! 700+ UPES students receive more than one job offer despite economic gloom

https://blog.upes.ac.in/incredible-but-true-700-upes-students-receive-more-than-one-job-offer-despite-economic-gloom/ [8]



Disproving the job market trends, UPES witnessed a strong placement season with students receiving multiple offers from reputed companies such as Wipro, TCS, Indian Oil, Dell and Accenture, to name a few

As the pandemic continues to disrupt the world, several sectors, especially education, have been severely affected. In their quest to provide uninterrupted learning, higher educational institutions have been facing two of the biggest challenges – online classes and placement drives on campus. Despite many hurdles, however, UPES witnessed a strong placement season by giving much-needed support to its students. As a result, <u>UPES students received multiple offers from reputed companies</u> through the campus placement drive.

A premier institution of learning, UPES always equips its students with the ability to address real-world problems and social challenges through immersive industry engagement and participation. The university is determined to enhance employability skills by providing graduates with industry exposure, a practical hands-on approach, and relevant knowledge which enhances their overall employability. From holding masterclasses to conducting online tests and interviews, UPES did not leave any stone unturned to ensure that their students have a job.

Constant and regular intervention in terms of training is crucial for an enhanced learning experience leading to better career opportunities. Therefore, UPES' Career Services Department focuses on creating well-rounded graduates who are prepared for the globalized world.

According to Manish Madan, Director, Career Services and Corporate Relations, UPES, "700+ students received more than one offer. In the current scenario, it is important to inculcate the right skills in students. Upskilling is crucial in the industry. At UPES, we impart skills that are high in demand and are fundamental for a career in the corporate world. This has also helped them to shine bright and grab multiple offers during the placement season."

Noormansha Narula from UPES School of Design says, "Placement season at UPES started in September. I was the first one from my batch to get placed in Dell Technologies. I also got an offer from Accenture. It was difficult for me to choose, but I decided to join Dell Technologies as an Analyst, Product Design. The faculty at UPES are subject matter experts and are friendly and helpful. The placement cell conducts training programs and mock interviews and brings the best companies on campus so that we can land our dream jobs. We were given practical knowledge about the present-day job market, and how to face different scenarios in the interview process. The placement team always supported us and encouraged us even when we failed."

A student of UPES School of Law, Manyata Singhal recalls that the placement training sessions involved resume writing, group discussions, and mock interviews. "The placement cell helped me to lift myself to new heights I never thought I would achieve. I want to express my gratitude to the Career Services Department for helping me improve at every step. Joining UPES was one of the first independent decisions of my life, and I am proud to say that it was also one of the best. I got successfully placed in not just one but two reputed organisations — Legasis Services Private Limited and Effectual Services. Management skills, working under pressure, confidence to face challenges, sincerity, and hard work helped me achieve multiple offers."

Shobhit Kumar from UPES School of Engineering and the Lead Student Placement Representative says, "With the support from my teachers, parents, and the Career Services Team, I was able to secure four offers from top-notch companies such as Wipro, Tata Consultancy Services (TCS), Cognizant Technology Solutions, and Indian Oil. The placement team had prepared us well for aptitude sessions, group discussions, and interviews. The pre-placement talk, seminars, and workshops helped me achieve my aim, which was to start my career with an MNC. The message I want to convey to my juniors is that there will be times when you will feel demotivated but believe in yourself and be confident."

A thrilled Daksh Bana from UPES School of Computer Science says, "I am thankful to UPES for providing me with a platform where I was able to hone my skills, develop my personality, and emerge out with flying colours. The university has been supportive throughout my journey. Ajay Rawat, Assistant Professor at UPES School of Computer Science, and Aditya Singh, Career Services Department always guided and motivated me. The placement department conducted aptitude tests, group discussions and mock personal interviews to prepare us for the final day. I thank the placement team and all my teachers who helped me get a job in four reputed companies: Cognizant Technology Solutions, TCS, Simplilearn, and Pegasystems."

# <u>UPES placements buck the trend; rack up 2500+ offers from 480+</u> companies

https://blog.upes.ac.in/upes-placements-buck-the-trend-rack-up-2500-offers-from-480-companies/ [9]

Despite the pandemic, undergraduate and postgraduate students from School of Engineering, School of Computer Science, School of Business, School of Design, and School of Law received 2500+ offers from 480+ companies



Campus hiring is an important platform for

students to get noticed in the job market and is a valuable addition to their professional experience. Students who possess relevant skills, and have industry exposure to some extent through internships, have better prospects of landing their dream job, in comparison to those who have had little or no exposure. Merely having a degree is certainly not good enough, the right skills are a must have in today's day and age.

UPES has been focussing on developing a world-class pool of young and talented professionals with relevant 'real world' education and 'on the job' exposure. The industry-readiness of UPES students has been one of the key differentiators for the recruiters.

The university's robust Career Services department ensures that the students have adequate industry exposure and get naturally and rapidly absorbed into professional roles on completion of their degrees.

Manish Madaan, Director, Career Services and Corporate Relations, UPES, says, "In March 2020 when the first nationwide lockdown was imposed, we were in the middle of our placement season for the graduates. The biggest setback was for our final year students as they were the first to experience virtual recruitment process and it was a new way of placements for us as well. We learnt a lot and our learnings helped us in preparing for this placement season. We geared ourselves up with video resumes, elevator pitches and improved our virtual presence. So, at a time when people are losing jobs, salaries are being cut and offers are being revoked, UPES has managed to offer multiple jobs to deserving and meritorious students. Credit for this goes to our faculty, who committed themselves to online teaching, and our students, who, despite all the challenges, ensured that they gave their best."

This year again, for the fifth year in a row, UPES School of Computer Science has achieved 100% placements. UPES students have been placed across various Indian and global corporations, start-ups and unicorns. The highest pay package for the year 2021 is 27 LPA from UPES School of Business.

About the multi-prolonged placement drive, Manish Madan says, "The whole interview process this year is being carried out virtually with the students and corporates participating from their respective locations. Organisations are giving assignments or taking virtual technical rounds as a part of the recruitment drives. Online assessment tests, virtual group discussions, aptitude tests, domain-specific online tests, and HR rounds are the stages involved in the recruitment process. It is important for us to train our students for all these new ways of recruitment well in advance. To ensure this, we make a series of interventions, such as holding webinars with industry experts, mock interviews to ensure that the student is comfortable during the actual placement drive, besides training them on their domain and soft skills. The university has not left any stone unturned to ensure that students have a job before they graduate."

UPES has been at the forefront of industry-oriented, future-ready, and world-class education, turning crisis into opportunity whenever the need arises. That's the reason it is the preferred choice for

corporates for recruiting fresh talent. This year industry giants like Accenture, Adani Power, Amazon, Deloitte, DTDC, TCS, Cognizant, SpiceJet, Infosys, Flipkart, Wipro, Byju's and Vedantu, have already recruited students from UPES. The university not only helps students in final placements, but also ensures that the pre-final-year students have industry exposure through internships on live projects under the guidance of industry mentors in online mode.

### **Employability Boot Camp**

UPES organises a <u>15-day Employability Boot Camp for its final year students</u>. Through insightful workshops, seminars, and training programs, this camp prepares students to face professional challenges; to survive and grow in their job. Additionally, it gives students comprehensive training, equips them with life skills, cognitive and metacognitive skills, oral and written communication skills, competencies to build resume and social media profiles, personal branding, and mock interviews.

#### Alumni Connect

Owing to its commitment to support the alumni in all aspects of their professional life, UPES has been going the extra mile to ease the burden on the families of its alumni. UPES offers a 35% discount on tuition fees for all post-graduate courses. This is applicable for alumni who have completed graduation from UPES and wish to pursue post-graduate courses at UPES or any other academic partner institution.

Besides successfully meeting the targets of maximum placements over the years, <u>UPES has been offering special placement assistance</u> to alumni. UPES acts as a bridge between the recruiter and alumni. UPES also supports in upskilling, building portfolios, and enhancing the resume.

Additionally, UPES has launched an initiative called 'Sahyog' that aims to provide help and support to the family of alumni by creating region-wise WhatsApp groups. Currently there are 350 + alumni across 20+ cities supporting this initiative and saving lives of people in need.

UPES gets ₹ 5 crore grant for inclusive-tech business incubator

<a href="https://blog.upes.ac.in/upes-gets-%e2%82%b9-5-crore-grant-for-inclusive-tech-business-incubator/">https://blog.upes.ac.in/upes-gets-%e2%82%b9-5-crore-grant-for-inclusive-tech-business-incubator/</a>
[10]

**DIANA GEORGE** · JUNE 17, 2022



### Image courtesy: Unsplash

The i-TBI, or the inclusive-tech business incubator seeks to foster a culture of innovation and entrepreneurship in higher educational institutions by creating a thriving innovation ecosystem buoyed by mentorship and funding for creative projects

In a major milestone for UPES, the National Expert Advisory Committee of the Department of Science and Technology (DST) has recommended the inclusive-tech business incubator (i-TBI), for a funding of Rs 5 crore under the NIDHI scheme. NIDHI (National Initiative for Development and Harnessing Innovations) is an umbrella programme pioneered by the DST, Government of India, for nurturing ideas and innovations (knowledge-based and technology-driven) into successful start-ups.

Speaking about the achievement, UPES Pro-Vice Chancellor Dr Ram Sharma says, "This is the first grant for a i-TBI in Uttarakhand. We are proud that UPES has taken a lead in setting up a i-TBI in the state, since this will create a niche for the university."

Explaining how i-TBI will benefit the region, Dr Ram adds, "Uttarakhand being a hilly region has peculiar characteristics, so technology can be a big enabler here and we believe that setting up a i-TBI will help resolve many of the state's problems by providing technological solutions to the local and regional challenges."

This initiative at the university is being led by Rahul Nainwal, CEO, Runway. Runway is a start-up incubator at UPES that offers mentorship, grants and investments, legal and incorporation support, and allocation of space to work. According to Nainwal, the generous grant will help set up the tech business incubator with the potential to bring about a "massive shift in the technological entrepreneurial mindset of the entire geographical and cultural ecosystem."

"This includes various stakeholders like students, faculty members, research scholars, alumni, as well as the local people in the hills who will benefit from i-TBI, as more technology-driven solutions are incubated and implemented," he adds.

i-TBI is aimed at fostering a culture of innovation and entrepreneurship in higher educational institutions (HEI) and nearby communities of the Host Institution (HI), by establishing partnerships between academia, investors, mentors, industries, and other institutions and creating a thriving innovation ecosystem buoyed by mentorship and financial support for creative projects.

UPES i-TBI will especially focus on innovative ideas which are at the confluence of social, economic, and developmental issues and technology, and provide them with the necessary training, mentorship, and financial aid to enable them to create scalable solutions.

Start-ups in the domain of blockchain, artificial intelligence, machine learning, drones, Internet of Things (IoT), Innovative Mobility Solutions, and manufacturing, amongst others, will be identified for incubation at i-TBI.

Students will benefit from the two-pronged relevance of i-TBI – the presence of the incubator on the campus will give the students the necessary exposure to disruptive thinking and innovative technology, and additionally, motivate students to be a part of i-TBI and work on technological and business problems to find inventive solutions.

The Department of Science and Technology launched the TBI scheme with an intent to support Prime Minister Narendra Modi's vision of 'Atmanirbhar Bharat', by covering all the 5 I's – intent, inclusion, investment, infrastructure, and innovation – to create an ecosystem for the growth of tech start-ups, especially deep-tech start-ups.

i-TBI is expected to be launched by January 2023.

## How UPES helped me to become a Data Privacy Analyst at Infosys https://blog.upes.ac.in/how-upes-helped-me-to-become-a-data-privacy-analyst-at-infosys/ [11]

### VAISHNAVI SHUKLA · JANUARY 6, 2021

Even during the pandemic, the faculty provided constant support to students. Periodic follow-ups with companies and regular feedback from the college helped me convert my assessment internship into full-time employment and I will be forever thankful to UPES for the opportunity



I hail from a small town in Uttar Pradesh. In 2014, I chose B.Tech Computer Science Engineering and LL.B (Hons.) with a specialisation in Cyber Law. The specialisation had its own peculiarity and advancements, focusing on the present-day needs. Continuous hard work, dedication and passion for six years and the association with cyber laws and technologies gave me some incredible insights and today, I am proud to say, I work as a Data Privacy Analyst at Infosys Ltd.

Just like other higher secondary students, I was worried about my college admissions after board examinations. I was clueless about the best universities for my course and how to proceed with my applications. It was then when I came to know about UPES Dehradun and how it is different from other engineering colleges. The university offered some in-demand specialisations which fascinated me, and I decided to sit for the entrance examination at UPES.

During counselling, cyber law grabbed my attention and I found it interesting. I never thought that I would pursue a career as a Data Privacy Analyst. Long back in 2014 many people were not even aware of data privacy. I tried my hands in different fields such as web development, hard core coding and cyber security. Finally, I developed an interest in Data Privacy. So, I decided to use my technical knowledge and implement it into a legal framework to further develop my career in the Data Privacy stream.

For me, college experience is difficult to express in words. With its sprawling 44-acre campus in the safe and scenic environs of Dehradun, UPES can make anyone fall in love with its scenic beauty and calm surroundings. I will always cherish the time I spent on campus. Going to the riverbed, celebrating

birthdays in nearby picnic spots, endless chats with my friends in the hostel, playing in food courts and taking part in various student activities, fests and events made my college life memorable.

Our faculty constantly helped us in dissertations and projects. Dr. Inder Singh from the School of Computer Science guided me in the project: Quantum Cryptography. Akanksha Singh from the School of Legal Studies relentlessly helped every student of cyber law. Jatin Bhagat played an important role in developing my interest in the field of cyber security. My professors always guided me, encouraged me, and most importantly believed in me.

I joined Infosys in February and opted for self-study mode. Therefore, by the end of the semester, I had doubts about the course and curriculum. But UPES faculty arranged quick learning classes and equipped me with all the industry-relevant skillsets. Our professors helped us sail through exams, dissertations, vivas and presentations so that graduating batches could transition smoothly to the workplace. The university also made the examination process fairly easy for us.

Due to the pandemic, online exams were held. Even during these difficult times, the faculty provided constant support to students. Periodic follow-ups with companies and regular feedback from the college helped me convert my assessment internship into full-time employment and I will be forever thankful to UPES for the opportunity.

(The writer is an alumna from UPES School of Law with a specialization in Cyber Law/Intellectual Property Rights)

## How a UPES alumna successfully crafted her dream career in Avionics Engineering

https://blog.upes.ac.in/how-a-upes-alumna-successfully-crafted-her-dream-career-in-avionics-engineering/ [12]

PRADEEP JAGWAN · AUGUST 14, 2020

Tanya Manchanda is currently working as an Avionics Engineer with Boeing, India. She is a celebrated employee and has been felicitated by the company for her active participation in organisational activities, people management, quality work and efforts on task completion to meet the milestones



Tanya Manchanda, a student of B.Tech. Avionics, class of 2009-13, UPES, has been successful in crafting her dream career. Currently, she is working as an Avionics Engineer with Boeing, India. Talking about her professional experience, Tanya said, "I am working on a project of Onboard Health Management System that provides other Line Replacement Units (LRUs) with a means to effectively communicate fault and airplane health information. I have been felicitated by Boeing India for my active participation in organisational activities, people management, quality work and efforts on task completion to meet the milestones."

When asked about her journey at the UPES Department of Aerospace engineering, she recalled the experience vividly. Tanya said, "It was the year 2009 when I attended the UPES counselling at Delhi and was confused about what to choose. I decided to go for the aeronautical sector as it has a wide scope. I saw the various courses in the UPES brochure. For me, Avionics was a lucrative option as one could choose to go beyond design and development. It is important to note that without pursuing Avionics, one cannot fly the aircraft, at least in the current scenario, and for the future growth of automation development."

She admitted that her journey at UPES was a rich learning experience. Reminiscing about her teachers from the Department of Aerospace and how they helped build her interest in the field, Tanya said, "I learnt many subjects of core aerospace and avionics engineering from various professors. I thank all the faculty members who taught me the concepts so well. I remember in my 6th semester in 2012, one of my teachers Dr. Sudhir Kumar Chaturvedi taught 'Introduction to Automatic Flight Control'. That was the turning point of my life. Under his guidance and mentorship, I wrote research papers, which later got accepted in the International Conference on Microwave, Antenna and Remote Sensing 2012. I learnt a lot during this tenure."

When she sat through the placement process, Tanya got selected in HCL Technologies Limited. "I along with 13 other potential candidates got selected in 2013. I joined HCL technologies the next year and worked on OAPI, a DO-178B standard project, having D-level security. The objective of the project was to develop a custom software tool in support of Flight Test Analysis, allowing more dynamic displays and manipulation of data," she added.

After four years of experience with HCL, Tanya switched to Boeing India, which was her "true calling". Today, she is a celebrated employee with the company. "Boeing India recognised me for taking ownership in FMS, Control Display Unit Verification and Validation tasks and competing on schedule. I am grateful to UPES for making me what I am today," Tanya concluded.

## How UPES propelled me to become an innovator <a href="https://blog.upes.ac.in/how-upes-propelled-me-to-become-an-innovator/">https://blog.upes.ac.in/how-upes-propelled-me-to-become-an-innovator/</a> [17]

MANOJ KUMAR AKULA - NOVEMBER 24, 2020

Best Rural Innovator Award by National Institute of Rural Development, Runner-Up at the World Robotics Championship, Winner at the Indian Drone Festival 2019 are some of the achievements under my belt



Ever since I joined UPES, I was active in both academic and extracurricular activities. Academically, I was

intrigued by topics such as Operating Systems, Artificial Intelligence(AI), Internet of Things(IoT), App Development, Data Mining, Software Testing Methodologies and different Programming Languages such as Mat-Lab, Solid Works, Ross and CAD. These topics developed a keen interest in me, and I wanted to apply my theoretical knowledge to some of the ideas that helped me conceptualize, design, and develop solutions and prototypes related to robotics and automation projects.

I have always believed in sharing and exchanging knowledge. Hence, I participated in several events to showcase my projects and learn from other participants. Eventually, I started conducting some technical workshops on IoT and Robotics at several renowned national universities and international schools across India. I chose the path of innovation and started leveraging technology that I was well-versed with.

Among my notable achievements have been the award for Best Rural Innovator bestowed by the National Institute of Rural Development (NIRD), India, for inventing a Sorting Machine which has

applications in food processing. My innovations were showcased at the Rural Innovators Start-up Conclave- and were published by NIRD, in their two books in the year 2018 and 2019, respectively. I was Runner-Up at the World Robotics Championship innovation contest, conducted by the All India Council for Robotics and Automation (AICRA). I was also the winner of the Indian Drone Festival 2019 conducted by ITDA and sponsored by the Uttarakhand government.

I wanted to apply my theoretical knowledge to some of the ideas that helped me conceptualize, design, and develop solutions and prototypes related to robotics and automation projects

In my journey, I met some of the brightest minds in UPES and the interactions and experiences with them inspired me to work on my skillset, particularly in the areas of software



programming in Robotics and Automation and advanced data processing in artificial intelligence. As I attended several workshops on Research and Development, Entrepreneurship, IPR and Product Development, I have the aptitude and <u>ability to pursue research projects</u> in collaboration with other students.

During my postgraduation, I was appointed as the head of the Robotic Club, where I guided my juniors and other students on their research projects and conducted technical seminars every week. Moreover, with the guidance of the knowledgeable professors in UPES, I have learnt a lot and won accolades for the university.

UPES offers an exhilarating environment that gives students a platform to explore their interests and gives a definite direction to their goals. Without a doubt, UPES transforms lives. Keeping up with the rapid advancements in technology requires a high degree of learning ability. And for the same, it is critical to study in an educational institution that can provide the necessary knowledge, prepare one to be adaptable to continuous change and ensure one's expertise and skillset remain relevant.

I am thankful I got a chance to study in UPES which made me confident, gave immense exposure, and most importantly, enhanced my overall personality.

(The writer is a postgraduate student of Automation and Robotics Engineering)

How a UPES alumnus is helping people find jobs https://blog.upes.ac.in/how-a-upes-alumnus-is-helping-people-find-jobs/ [18]

PREETI ANEJA - JULY 16, 2020



Suyash Jain, an alumnus of UPES with a strong entrepreneurial DNA, along with his colleague Rajat Agarwal, has launched a unique social initiative to help people to find employment during COVID-19

COVID-19 has altered the way we live and work and almost every industry is feeling the heat. Lay-offs, pay cuts and furloughs have impacted many lives drastically. Still, companies in sectors such as ecommerce, pharma, food, online education, gaming, etc., are looking to hire people. In order to tap into these opportunities and help job seekers, Suyash Jain and Rajat Aggarwal, a duo working in a B2B e-commerce company called Bijnis, came up with the concept of 'COVID-19 Free Job Forum'. Their idea is being highly appreciated by both the jobseekers and the recruiters. Suyash Jain, an alumnus of UPES School of Business, shares his journey from being a BBA student to a social entrepreneur.

Suyash Jain and Rajat Aggarwal, a duo working in a B2B e-commerce company called Bijnis, came up with the concept of 'COVID-19 Free Job Forum

How does this forum help the job seekers?

COVID-19 Free Job Forum is an online job database to connect those seeking employment to potential employers. This year on April 27, I read a news article

### Initiator's Behind Free Job Forum





Suyash Jain

Rajat Agarwal

that said: 'A B2B company lays off 3,000 contract workers' mainly consisting of delivery executives and field sales team. The news shook me hard as in our business we were facing challenges in hiring a field sales team due to shortage of talent on job portals. So, realising the gap between the job seekers and job providers, I, along with my friend Rajat, decided to take this plunge to bridge the gap.

It has not been an easy journey; the candidates doubted our authenticity, ability to provide desirable jobs and the ultimate goal of the initiative. We worked hard to build our credibility, sent emails to hirers and job seekers using our original identities, shared our LinkedIn profiles and personal e-mail ids. We also created a company page on LinkedIn to act as a bridge between employers and candidates and provide useful resources, job-related information and links to other pages having job opportunities.

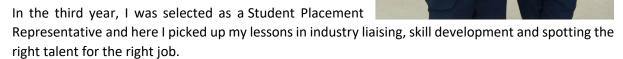
We already have a live database of 8,500+ applications divided across domains, salary, and job location. This database is shared live with 400+ HR personnel from companies that are currently hiring. Data security of job-seekers remains our topmost priority; response sheets are only available on request. We do stringent checks of the hiring status of employers before giving access to any e-mail ids. The entire service is free for both recruiters and job seekers.

What inspired you to embark upon an entrepreneurial expedition at such a young age?

I have been an average student who never participated in any competitions in school and had hardly any interest in sports and studies. I would credit my experiences at <u>UPES School of Business</u> during my BBA in Retail Management (2015-2018) for sowing the seeds of entrepreneurship in my mind. It all began when I got a chance to participate in a marketing competition with my friend Kritika Navetia. We were able to sell an idea and won the first prize! Thereafter we participated in various management competitions and won several prizes for UPES. The most memorable achievement, out of all our victories, was winning the prize for the Best Business Plan in IIT Kanpur E-Submit 2016 and 2017. During i5 Summit at IIM Indore, our business plan attracted the attention of Edelweiss, a leading investment and financial services company.

## I got a chance to participate in a marketing competition with my friend Kritika Navetia

I did my internship in a start-up, where I learned about building businesses from scratch. Being keen on acquiring as much knowledge I could, I did several virtual internships as a content writer, sales executive, digital marketer and social media marketer. While at UPES, I also started 'EVyopar Club', the first retail club of the college, with the help of my professors. The club used to conduct and promote activities related to the retail industry.



All my professors encouraged me and extended their best support in making these wins possible and infusing me with the vision to make things happen not only for myself, but for people around me as well.

What would be your advice to youngsters?

Business education is all about nurturing young minds with business acumen, life skills like teamwork, problem solving ability and a sense of responsibility towards the society. I would like to express my gratitude to UPES and my professors for inculcating all the desirable traits in me and helping me become a better version of myself.

I would advise all my juniors to participate in business plan competitions, debates and research projects under faculty mentorship. Internships are a great platform to learn and grow, so students must give their best effort to their internship projects. The experiences at UPES gave me the skill and confidence to take up challenges and make big strides in learning.

### Start-ups: The magic of new beginnings

https://blog.upes.ac.in/start-ups-the-magic-of-new-beginnings/
[19]

### PREETI ANEJA · MAY 3, 2020

Mayank Garg, a student of UPES School of Law, is the founder of start-up JRTC Intern. He strongly believes that his idea will be a milestone in facilitating internships to law students all over the globe

An optimist sees an opportunity in every difficulty, they say, and the students of UPES continue to create solutions that benefit the society at large. Mayank Garg, a student at the <u>School of Law, UPES</u>, is the mind behind the successful start-up JRTC Intern. It is India's first-ever internship governance platform for the legal sector. This platform will serve as an interface between law students seeking quality internships and top law firms looking for



deserving interns. The idea promises to bring relief to thousands of law interns in the country who struggle in the absence of any organized forum or channel.

The idea germinated in a quest of helping a friend to secure an internship in 2017. The struggle then helped in identifying the big challenges concerning internships like the lack of awareness about opportunities, no proper processes to apply for internships, the lack of trust and willingness on the part of big law firms and nepotism.

It took immense hard work and toil in the form of rigorous research, numerous brainstorming sessions, hours-long interactions with the students, top law firms and mentors at the School of Law, UPES, to lay the foundation of JRTC Intern. The start-up is being patronized by nationally acclaimed law firms like Cyril Amar Chand Mangal Das, Shardul Amar Chand Mangal Das, L&L partners, Lakshmi Kumaran Sridharan and top lawyers namely advocate Kapil Sibbal, Salman Khurshid to name a few.

"We have a well-designed process to benchmark the skills and aptitude of the aspiring interns, comprising eligibility examination, the General Law Internship Test, and an interview. This initiative will go a long way in altering the way we talk about law internships in India and help us in nurturing a better breed of lawyers, strengthening the legal system of the nation," said Mayank Garg, founder JRTC Intern.

Talking about their strategies in reference to the <u>impact of the COVID-19 pandemic on internships</u> Mayank informed that owing to their proactive approach towards artificial intelligence and machine learning, they have all the systems in place to ensure internship opportunities continue via online mode. They are set to deliver.

He also mentioned that with joining of Mr. Parikshit Chandgothia, (alumni, School of Law UPES), a technology enthusiast, they have high aspirations for automation, improved technology interventions and collaborations with international law firms of repute in the future.

Among many accolades, the team has also received a letter of appreciation by the former president of India, Mr Pranab Mukherjee.

Mayank expressed his gratitude towards his mentors at the School of Law and the UPES Council for Innovation and Entrepreneurship (UCIE), for their constant support and incubation mentoring, instrumental for this soaring success.

## Emerging jobs for aerospace engineering graduates <a href="https://blog.upes.ac.in/5-career-options-for-aerospace-engineering-graduates/">https://blog.upes.ac.in/5-career-options-for-aerospace-engineering-graduates/</a> [20]

BY A CORRESPONDENT · MARCH 18, 2021

Aerospace engineering has two subbranches, aeronautical engineering that focuses on flying machines within the atmosphere, and astronautical engineering that covers everything beyond the earth's atmosphere



Aerospace engineering involves designing, developing, and maintaining aircrafts and spacecrafts. One of the toughest and exciting branches of engineering also involves testing missiles, rockets, and weapon systems. Aerospace engineering has two sub-branches, aeronautical engineering that focuses on flying machines within the atmosphere, and astronautical engineering that covers everything beyond the earth's atmosphere.

In India, the aerospace and defence market is on a high-growth trajectory. The increase in domestic air travel and support from the government has significantly contributed to this growth. The aerospace industry has also experienced a renewed push with ISRO's space exploration endeavours. From government organisations to private and public airline services, aircraft manufacturing units, and even defence—aerospace engineers are in high demand.

A full-time course in aerospace engineering in India teaches students to develop and design innovative technologies for aircraft and spacecraft, ways to make flights safer, more economical, fuel-efficient, and environment friendly, among other things. It's an exciting time to be an aerospace engineer and chart a thrilling career, both in India and abroad. Take a look at the five job roles that an aerospace engineering can pursue.

Aerospace engineers: If you like designing and building flying machines, then this is the right choice for you. As an aerospace engineer, your primary task will be to design, test, and develop aircrafts and spacecrafts. This job role entails working in large teams. Some of the government agencies that hire aerospace engineers are National Aeronautical Laboratory, Civil Aviation Department, Hindustan Aeronautics Limited, Defence Research and Development Laboratory. Apart from this, aerospace engineers are also needed in private airlines and the defence industry.

Flight Technicians: The main task of flight technicians is to maintain, construct, and regularly test the operating systems of the aircrafts. Flight technicians are in charge of making sure the aircrafts and the control systems are operating smoothly. Not just testing, technicians are also supposed to repair the equipment being used. They are needed by aerospace and aviation manufacturers and airlines, as well as in research teams.

Avionics Engineers: An avionics engineer designs and programs electrical systems used on an aircraft, spacecraft, and satellites. They help provide support for all communication, navigation, and guidance systems, and also tests them to ensure they are working properly.

Satellite and space research: Today, satellites play an important role in ensuring our lives run smoother and better. They are used for GPS navigation, long-distance communications, to predict the weather, monitor global temperatures, and much more. And space exploration in India has been revived with successful launches of Mangalayan and Chandrayan. As graduates of aerospace engineering, you can chart a successful and interesting career as part of research teams in both these areas.

UAV Pilot: Unmanned aerial vehicles are aircrafts without a pilot on board. It is operated remotely from an unmanned aircraft system comprising a ground-based controller and a system of communications between the pilot and the UAV. In the last few years, UAVs have become one of the most prominent emerging technology impacting almost all sectors. Today, the Indian government is using UAVs for assessing natural disasters, inspecting railways, detect illegal mining, etc.

You can also choose to keep studying further and get a Master's degree. UPES offers M.Tech in Computational Fluid Dynamics as well as a PH.D. The university's School of Engineering encompasses an array of courses in aerospace engineering with a variety of specializations to choose from. The courses have been co-developed by industry partners and help students gain specialized knowledge and practical skills. The multidisciplinary and holistic learning approach of UPES moulds students to be future-focused and ready to face the challenges of the world. With international internship opportunities and a high placement record, UPES is setting a new benchmark in the field of engineering studies in India.