GTU INNOVATION COUNCIL

THE FINAL YEAR PROJECT

Read what the experts expects from their students

GTU Innovation Council has compiled the messages from various academic thought leaders about their views on solving real life challenges by their students as a part of final year project

"When you solve a real life challenge you not only become better engineering student but also you become a better human being "-

Prof Anil K Gupta, Executive vice Chair, National Innovation Foundation (http://www.nif.org.in/), Member National innovation council

It is the process of doing, where all the learning happens.

As always, let us explore our world on campus and find where the excitement lies. The answer is obviously going to be "Canteen". So let us travel to the canteen and listen to what is going on there: "Arrey yaar, aaj to meri vat lag gayi. Maine apne haato se, apna dimag ladake ek robot banaya. Jab sab ko dikhane gaya to woh to chala hi nahi!" LoL!!!! Scene No. 2: Let us look at another take on the same theme: "Yaar, aaj to project submit karvana hai aur maine to baazar me inquire kiya to woh to bohot mehanga hai. Ab kya karu?" Scene number 3, 15 years later: "Hey met how are you? Did your robot finally work?" Nobody (and that includes you) is going to remember the project of Scene No.2 at any point of your lifetime. In fact you will look back at scene 2 with guilt, with a sense of how much you missed when you bought a ready-made project. So choose today to fulfill your dreams for tomorrow. More than the finished product, it is the process of doing, where all the learning happens. Remember the odd cricket ball you threw, the kite that you flew? Would you cherish the memory of the flying or the mere watching of someone else flying the kite? Happy tinkering. Let you imagination flow. Find a real problem in an industry.

Hope to see you 15 years from now, to share your memories of what worked and what didn't, in your project. For, believe me, this one experience is going to be your life transformer.

-   **Dr. Rajul Gajjar, Principal, GEC Gandhinagar, Sector 28**

Way to the Project

The project may be analytical or computational or experimental or combination of them based on the latest developments in the area of interest. You can apply idea into application through experiments and/or simulation. It will also help you to decide the topic for further research work in your life. Through the project, you are supposed to learn more than one or all of following attributes.

- ✓ Problem formulation techniques
- ✓ Analysis techniques of published data
- ✓ Identification of scope and objectives of research work
- ✓ Techniques for the design of experiments
- ✓ Associated administration for project work
- ✓ Development of compilation skill
- ✓ Writing skill & Presentation skill
- ✓ Technical Paper writing
- ✓ Report preparation techniques
- ✓ Fundamentals, information, reviews & in-depth knowledge in the desired area

It is worth noting that for any placement interview after graduation, the interviewer mainly focuses on BE project and so with paid project you will suffer a lot.

- **Dr N M Bhatt, Director, Gandhinagar Institute of Technology**

A big & radical change usually begins with a small genuine idea

The university brings you this huge opportunity to make your mark at the industrial world, by unleashing your creative and fresh skills, while you are still connected to your institute with theoretical & technical support! A big & radical change usually begins with a small genuine idea, expressed as a project document. A novel project has always drawn attention of the industries. Historically, the list of success stories features such creative project idea providers.

I strongly urge all you final year students to make this huge opportunity count by carrying out a novel and meaningful project during this crucial final year. I am sure you will refrain from all pseudo project concepts and purchased projects, for, it can NEVER create the difference that a genuine idea can! Wish you all the success!

- **Prof. P.C. Vasani, Principal, Lukhdhirji Engineering College, Morbi**

Magic Spell of the successful project with good score – "search innovative project during summer break June-July within surrounded industries "

The career opportunities are primarily based on the project innovations.

On completion of six semesters, students have to work on project in three parts:

1. Students have to **search innovative project during summer break June-July within surrounded industries**, faculty expertise or exploring international contact (GTU is giving opportunity for the possibilities of student's international experiences in Canada, USA, Germany and UK Universities).

2. During 7th semester student have to identify the project, define IDP/UDP, start literature survey, patent survey and prepare the preliminary model to start investigations.

3. During 8th semester student prepare the prototype test for investigation, establish the results, conclude the innovations, attempt for publication and patents.

College and faculty needs to promote this exercise to identify the project with a novel idea among students. If student does the above exercise successfully to work on a novel innovative project, scoring the project evolutions is the primary advantage, along with the job opportunities.

- **Dr K N Mistry, Dean, Faculty of Engineering, GTU and Principal, GIDC Degree Engineering College, Abrama, Navsari**

Don't go for purchased projects or paid projects.

Today's India is fast emerging as a destination for world class Research and Development Centers and Innovation hub. Young friends, these are the signs of even a brighter tomorrow for India and its people. You must, therefore, be highly excited to make your own contributions to the growth and development of India of your dream. At SAL Technical Campus, we have a tradition of nurturing leadership qualities alongside developing capabilities to challenge the state of art technologies. This we do by inspiring you to involve into a whole lot of innovative projects being pursued by the inspired student community under the guidance of their faculty mentors. Don't go for purchased projects or paid projects.

Let you empower yourself with the Wings of Knowledge and Power of Innovation and with this Empowerment imbibe an attitude akin to a positive and proactive thinking, caring concern for men and nature and above all, an eagerness to serve and excel in your chosen domain of activity throughout your lifetime.

- **Dr.Rupesh P.Vasani, Principal, SAL Institute of Technology**

"There is no shortcut to success and no alternate of handwork"

Of all the new ventures and initiatives taken by Gujarat Technological University, according to me, the most beneficial policy/implementation directly applicable to students is that of IDP (Industry Defined Problem). The industry complains about less employability of engineering graduates, whereas the students crave for practical industrial exposure to reinforce their theoretical knowledge. GTU has done an awesome task by solving, these complementary problems by bridging them through IDP. Students solving industrial problem- a widespread trend in the developed countries. It's like an crude diamond, whose value have not been realized, due to the ignorance on the part of students about its innumerable benefits like industrial exposure, developing practical skills, creating rapport with industry, beneficial for placement, grooming of technical skills and many more....

The students who prefer to put "old wine in new bottle" by just copying earlier works are actually keeping themselves deprived of this wonderful oppournity.

So I would like to personally request all the students to take a taste of IDP/UDP and experience its rich harvest. Best wishes..........

- **Dr. Sachin Parikh, Principal, V.V.P. Engineering College, Rajkot**

Don't be afraid of failure

The genuine efforts from Diploma engineering students will only be appreciated in terms of the awarding marks/grade for IDP/UDP. **The students should observe real life problems of the industries/ organizations in their surroundings. Take it as a challenge and provide innovative solution. Don't be afraid of failure as it is the policy of GTU to appreciate failure even if it is full of efforts, if it is a great learning experience which is more than success and if it is full of genuine and innovative efforts**. The copy/paste of ideas/circuits/models/projects are not going to be considered as great work, on the contrary the student may be at loss in getting marks/grade at the time of evaluation Your genuine innovative effortful work can be a great support to your surrounding as well as to you as a student which may help in transforming your career into top gear as an engineer. Be genuine in work - don't Copy, trust yourself and your capacities.......you will surely come up with miracle.

- **Dilip Ahir, Associate Dean- GTU-Zone 4, Group of colleges**

A project which can be Patented

The final year under graduate program is to show the ability of the students to apply his/her knowledge in the domain to create an outstanding engineering product with an innovative concept. The students must put all efforts for bringing an engineering product in the form of his/her project with the support from industry professionals, GTU innovation council, Institute and faculty members which can be patented.

- **Dr. Axay Mehta, Director, Gujarat Power Engineering and Research Institute**

Say NO to plagiarized projects

It is of prime importance that each student of final year will do IDP/UDP with great enthusiasm and integrity. The idea of giving so many man hours in the university curriculum for this purpose itself speaks about its importance and the value addition it has to the overall development of the student in terms of ideation, observation power, conceptualization, identification of technical rigor, time management for desired outputs, analyzing practical results, application of theoretical considerations and presentation skills. All these values are lost when a student purchases projects from so called 3rd party providers who are playing with the careers of students. I would strongly suggest to all students to refrain from such activities. These plagiarized projects should be rejected by the university.

-**Dr Praful Bharadia, Principal & Academic Co-Chairman, Mehsana Sankul, Saffrony Institute of Technology**

Innovate something to leave your own signature in the end.

As students final year project is for one year duration but as a future engineer it is for lifetime. So, let us take this challenge with great sincerity and commitment that you will innovate something to leave your own signature in the end.

Project Milestones: ShodhYatra ----→Problem ----→ Patent Search & Review ----→ Objectives ----→ Innovation ----→ Product ----→ Patent ----→Enterprise

- **Dr. R G Kapadia, Principal (I/C), Mechanical Engineering, Shri S'ad Vidya Mandal Institute of Technology, Bharuch**

Trying for solutions of industry problems, you can learn a lot.

I am very happy to inform you that you are on the verge of completion of your bachelors of engineering within a short time (one year). As on current status of educational system there is a lot difference between our syllabus and industry needs or challenges. Through IDP, you can observe the working conditions in industry and their problems. By trying for solutions of those problems, you can learn a lot about the field. But please make sure that this genuine way is little longer and tougher, but there is no any shortcut of any success path. We can provide you IDP / UDP topics in our/any college, if you are not in a position to find out or get permission for IDP work. I humbly request you all too please do your own work and get success in life.

- **Dr. V M Patel, Principal, Shanker Sinh Vaghela Bapu Inst. of Technology**

Select the project of your self-interest and industry requirement

As Steve Jobs has rightly said "Stay Hungry, Stay Foolish" is true for final year project. There are some simple things one has to keep in mind for selection and implementation of their project. Select the project of your self-interest which must synchronized yourself with industry requirement and in turn creates job opportunity. At the end of the day market your project by national and international exhibitions show casing, showing to industry expert and by use of social media. All the Best

- **Dr. Mitesh Popat, Principal, Sanjaybhai Rajguru College of Engineering**

Take a novel idea by literature survey and make a real life useful project

The project will make it easy for you to smooth out the transition from academic to professional environment. The project made in one year, giving everything that you have and understanding everything that you utilized, would give you a ***sense of self satisfaction and would increase the confidence within you***.

So I suggest you that take a novel idea by literature survey and make a real life useful project that gives you a sense of belonging ness of that project.

- **Dr. Ashish M. Kothari, Assistant Professor, Atmiya Institute of Technology & Science, Rajkot**

You can get a job at the same place where you have done your project.

The jury from past experience always comes to know that whether it is a 3rd party project or you have done on your own... If you are doing your own project, You learn to work in a team, share responsibilities, meet time deadlines of your guide, go to different places for getting the material, visit industries & interact with Senior Engineers, prepare reports, etc.

 If you are into Computers / Software, you will inevitably get a job at the same place where you have done your project.

 Determining by what process the work will be carried out; planning the detailed phases of the project; adopting one or more design methodologies; analysing requirements; using (or constructing) tools; construction of one or more artefacts (hardware, software, document); evaluating your solution to the problem; reporting on your work.

- **Prof. Shabbir Ghadiali, Head, Department of Training and Placement, Sarvajanik College of Engineering & Technology**

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