

Title: Research-led Financial Self-Sufficiency for Growth

Objectives (in 100 words):

Aiming for self-sufficiency for current and future financial needs of the institution is practiced at IIT Hyderabad with the following objectives in mind.

1. To promote autonomous decision-making at the institutional, departmental, research center, and individual faculty level.
2. To empower the relevant stakeholders so as to plan, strategize, execute, and achieve the intended goals.
3. To create a nimble, agile, and socially impactful ecosystem geared to attain maximum success with optimal resources.

Context (in 150 words):

Institutional growth catering to student and faculty support, research needs, and other infrastructural enhancements requires pooling of large amounts of money. Traditional higher educational institutions in India meet this either by governmental support systems, or by relying heavily on student tuition fees. IIT Hyderabad adopts a more practical and sustainable approach where the money needed for future growth is met in part by funds from research operations and funds from institutional donors. This model is promoted not only at the institutional level but also at the level of research centers and individual faculty that promotes autonomy, empowerment, and self-sufficiency. This model also requires individuals and the institution to identify opportunities and areas for growth, create impact in their research, technologies, and solutions, and adopt an agile strategy that emphasizes optimal use of resources.

Practice (in 400 words):

Achieving financial self-sufficiency via research operations requires the constant efforts of all the stakeholders. Some of these efforts are outlined below.

Faculty and research centers seek the necessary funds for their research needs through research proposals from governmental and industry bodies and translating research into societally useful and impactful technologies and solutions. These steps go together with being able to carry out cutting-edge research and gaining a strong foothold in their peer community. The faculty also raises the necessary funds needed to attend workshops and conferences and present their work.

At the institutional level, there is a constant effort to understand the landscape of research-led higher education, identifying and growing academic and research strength in emerging areas such as Blockchain, Internet of Things (IoT), and Quantum Computing, Artificial Intelligence and Machine Learning (AI&ML) etc.

Targeted outreach efforts are continuously undertaken to sensitize and engage with the society. These are via events such as the R&D Showcase, workshops for journalists, industry roundtables, College Affiliate Program, summer and winter schools for college students and high schoolers, and the like. These programs are aimed at different segments of the society and are helpful in creating long-term value for both the participants and IIT Hyderabad.

Research infrastructure such as a campus wide computing facility, a MAKER lab, and the like are set up as shared resources to optimize usage. These resources are used in course projects too enabling students to get trained on state-of-the-art tools and infrastructure and transition from course work to research project seamlessly.

The agility and nimbleness of IIIT Hyderabad that is accrued due to our practices are reflected in IIIT Hyderabad devising multiple channels of admissions that are appropriate for the nature of programs. IIIT Hyderabad offers admission to M. S and Ph. D. programs via a round-the-year standing committee model that offers admissions based on the suitability of the candidate to the program with the recommendation of a faculty member.

Evidence of Success (in 200 words):

Following the above practices, IIIT Hyderabad has been able to wean away from revenue generation exclusively from tuition fee alone. According to latest financial data of the institute, 40% of the revenues of the institute every year come from research operations including project grants and technology transfer modes. Several leading technology organizations such as Ripple Inc., and Tata Consultancy Services have donated to research expenditure as well as setting up physical infrastructure. The common campus compute infrastructure is set up pooling up funds from multiple research projects and has a 14% usage statistic.

Research at IIIT Hyderabad results in multiple publications every year at leading international and national conferences, win best paper awards, special mentions, best paper candidates, at these venues. The campus has a high h-index of 58 and ranks among the top 6 institutes for Computer Science education across the country, first, and in the top 10 in the sub-discipline of AI and Robotics in the country and across Asia, respectively.

The nimbleness and agility provided by our model allows IIIT Hyderabad to admit undergraduate students through multiple modes of admissions each catering to distinctive student segments allowing for a diverse incoming student body that enriches the learning experience of all.

Problems Encountered and Resources Required (in 150 words)

Adopting self-sufficient resource generation via research operations is an ongoing journey. IIIT Hyderabad conducts several internal workshops and discussion sessions to educate new faculty about research funding, technology transfer, and patenting. Revenue generation via project proposals is subject to the vagaries of the fluid nature of governmental and industry funding cycles.

IIIT Hyderabad provides a generous start-up research grant to new faculty to the tune of Rs.15,00,000/-. In addition, all faculty are provided with Professional Development Assistance that is in tune with their achievements over the past year ranging from Rs 75,000 to Rs 9,00,000 per year per faculty. The total resource mobilization through these mechanisms is of the order of about INR 1.5Crore per year.

Additional Notes (in 150 words)

The practice of achieving financial self-sufficiency via research operations is a global best practice followed by leading private research universities of the world. Within the domestic context, this model followed is being adopted by other IIITs in different ways. It is our strong belief that over time we will be able to increase the percentage of revenue generated via research operations to beyond 50% so that tuition costs can be kept in line with annual inflation. We also expect that with sweeping changes in the higher educational scenario in the country, our model will find relevance across institutions and IIIT Hyderabad will be happy to share the learnings from our model with peer institutions.
