

The institution completes the Quality Initiative proposal by responding to the questions in each category of the template. The institution may choose to include a brief implementation plan that addresses many of the questions below and replaces portions of the outline. Proposals should be no more than 4,500 words.

Overview of the Quality Initiative

1. Provide a title and brief description of the Quality Initiative. Explain whether the initiative will begin and be completed during the Quality Initiative period or if it is part of work already in progress or will achieve a key milestone in the work of a longer initiative.

Title

First Year Education Positioned as the Critical Bridge to a Career Path

Description

The objective of this IIT Quality Initiative proposal is to enhance the first year student experience through collaborative, multi-disciplinary problem-based learning. The significant shifts in curriculum structure are

- a. to extend IIT's signature Interprofessional Projects Program (IPRO) to first year students. IPRO is a well established collaborative, team-based learning environment in which students from various concentrations and disciplines work together to solve real-world problems.
- b. institute "course flipping," making use of classroom technologies and widely available academic Internet resources, in those courses that lend themselves to discussion. The IIT course would then be a class meeting of 15-20 students to discuss the material and apply it in project formats.

The balance of the freshman year would involve project learning with a broad coverage of material focused on potential career paths. Within these available options, the emphasis would be expanding communication skills and critical thinking.

This proposal also recognizes that it is an unrealistic assumption that a high school graduate must be expected to select their major at initial enrollment or to understand the requirements for graduating within a certain period of time. To remedy this, students would take part in an initial interview and advisor process in which interdisciplinary student teams would be formed to reflect personal individual interests in an appropriate mix related to proposed issues. The initial advisor process would also require each student to create a plan in the student degree-audit system, "DegreeWorks" and to declare a major prior to completing the first year of study. This will ensure that each student's plan of study leads to a degree within a specified time frame at IIT.

Sufficiency of the Initiative's Scope and Significance

2. Explain why the proposed initiative is relevant and significant for the institution.

The single most important driver of change that must be leveraged for IIT to excel in the 21st Century is the recognition of the new demographic of the student body graduating from K-12. Their entire lives have involved constant exposure to the Internet and they have widely adopted the use of mobile devices and social media to stay connected with their friends and peers. Their school experience is increasingly based on project- and inquiry-based learning and they expect or even demand the integration of technology in course content. These students find traditional materials and lecture-based classes boring and uninspiring. Moreover, pedagogical research has proved that these conventional courses are ineffective with students achieving only a very low retention of information. IIT must provide a continuity of the learning environment today's students are accustomed to in order to attract top students and engage them in advancing their education to the next level.

To accomplish this, we propose...

Extending IPRO to first year. This will provide a collaborative cross-disciplinary framework for students to learn the skills necessary for inquiry, investigation, discovery, and life-long learning, as well as build a foundation for the student to analyze a problem and identify, develop, and communicate a solution. It will also lead to the development of formal and informal student learning communities during the student's first year. Such communities are important because they often continue to thrive beyond the first year. Students who work together in the first-year IPRO will continue to interact after they move into their disciplines and after graduation these communities provide the networks that students need to build their career and progress in life. This new first-year IPRO must also incorporate the more generalized content of the existing ITP (Introduction to the Profession) courses as an overview of all the professions or of professionalism more generally. Subject major-specific ITPs will be pushed back to the second or third semester, after the student has selected a major and will focus on the unique aspects of each discipline without the need to cover topics common across all professions.

Institute "course flipping" making use of classroom technologies and widely available academic Internet resources should be implemented in those courses that lend themselves to discussion. The IIT course would then be a class meeting of 15–20 students to discuss the

material and perhaps apply it in project formats. Postponing the requirement for students to select a major until the second or third semester. This allows students to be exposed to a comprehensive overview of the professions during first year regardless of the area in which they choose to study.

Requiring students to create a plan in the student degree-audit system, "DegreeWorks." DegreeWorks will ensure that the student plan leads to a degree within a specified time frame at IIT. Faculty advisors can assist students with creating a plan, and central support by Academic Undergraduate Affairs will ensure that DegreeWorks results are accurate and up to date. The student plan data will reside in the central University database (Operational Data Store). This data will be used to:

- Project demand for courses that are offered in the future terms
- Taylor class sizes based on pedagogy and not unforeseen demand
- Assist course schedulers in all academic units
- Make sure that the right mix of courses are offered in the right place at the right time

3. Explain the intended impact of the initiative on the institution and its academic quality.

To increase the stature of IIT's UG programs, the academic core of the institution must instill a sense of community that positions the student as the highest priority and recognizes faculty who demonstrate a commitment to these goals of the university.

Clarity of the Initiative's Purpose

4. Describe the purposes and goals for the initiative.

- By concentrating the educational experiences of the first year on a more mature decision of selecting a major, the remaining three years required for graduation can be much more constructive and rewarding.
- The initial interview process and identifying an "academic coach" for advising and proactively tracking their academic progress should not only increase student satisfaction but also improve student retention and the 4-year graduation rate.
- The dynamics of the first year experience should also increase the expectations for the remaining educational program and continually build an individual confidence and school spirit that IIT is the place to be.

5. Describe how the institution will evaluate progress, make adjustments, and determine what has been accomplished.

- Degree of implementation of the program, first to second year retention rates, overall four- and five-year graduation rates
- Student achievement, such as team/peer evaluations, assessment of learning experiences within each project, “real time” evaluation of iPad progress, dialogue of group discussion of online materials and individual student evaluations.
- Student and faculty feedback.

Evidence of Commitment to and Capacity for Accomplishing the Initiative

6. Describe the level of support for the initiative by internal or external stakeholders.

The Provost and the Dean’s Council have stated support and commitment to this proposal.

7. Identify the groups and individuals that will lead or be directly involved in implementing the initiative.

Interprofessional Project Staff, the Quality Improvement Initiative subcommittee of the NCA Accreditation Committee, and the Undergraduate Studies Committee.

8. List the human, financial, technological and other resources that the institution has committed to this initiative.

Existing resources for Interprofessional Project courses and the existing DegreeWorks implementation should be sufficient to fulfil the requirements of this proposal.

Appropriateness of the Timeline for the Initiative (The institution may include a brief implementation or action plan.)

9. Describe the primary activities of the initiative and timeline for implementing them.

The quality improvement initiative will be phased in over 3-5 years. The first phase will commence in Fall semester 2013 and consist of two parts: a prototype project and a full project.

- The full project will require all first year students to create a plan in the student degree-audit system, “DegreeWorks.” DegreeWorks will ensure that the student plan leads to a degree within a specified time frame at IIT. Faculty advisors can assist students with creating a plan, and central support by Academic Undergraduate Affairs will ensure that DegreeWorks results are accurate and up to date. The student plan data will reside in the central University database (Operational Data Store).

This data will be used to

- Project demand for courses that are offered in the future terms
- Taylor class sizes based on pedagogy and not unforeseen demand
- Assist course schedulers in all academic units
- Make sure that the right mix of courses are offered in the right place at the right time

The prototype project will affect one or more student cohorts and will consist of:

- Postponing the requirement for students to select a major until the second or third semester. This allows students to be exposed to a comprehensive overview of the professions during first year regardless of the area in which they choose to study.
- Moving the initial IPRO (Interprofessional Projects) course to the first year and incorporating the more generalized content of the existing ITP (Introduction to the Profession) course and an overview of all the professions. Subject major-specific ITPs will be pushed back to the second or third semester after the student has selected a major and will focus on the unique aspects of each discipline without the need to cover topics common across all professions. This combination will provide a collaborative cross-disciplinary framework for students to learn the skills necessary for inquiry, investigation, discovery, and life-long learning, as well as build a foundation for the student to analyze a problem and identify, develop, and communicate a solution. This will enable the development of formal and informal student learning communities in freshman year. Such communities are important because they often continue to thrive beyond the freshman year in University. Students who work together in the freshman IPRO may still continue to interact even after they move into their disciplines, and once they graduate, these communities often provide the necessary networks that students use to build their career and progress in life. Guest speakers from industry, government, and academia, with an emphasis on IIT alumni, could be invited to speak with the IPRO cohorts about their fields, current trends, etc.
- Experiment with “course flipping” in selected classes, making use of classroom technologies and widely available academic Internet resources should be implemented in those courses that lend themselves to discussion. The IIT course would then be a class meeting of 15–20 students to discuss the material and perhaps apply it in project formats. This becomes iPad 101 and IIT has a long legacy now of distributing iPads, which are now the medium for IIT education.
- The balance of the freshman year could involve project-based learning wherever possible, with a broad coverage of material focused on potential careers in business, industry, government, and academia. Available options could reflect student consensus.

The second phase, starting in Fall 2014 or 2015 will consist of:

- expanding the prototype project to include all first-year students
- Sequencing more advanced IPROs concentrating on innovation and research throughout the curriculum.
- Establishing a teaching excellence center to promote the use of technology in the classroom, to answer questions, share ideas, troubleshoot problems, provide templates and tools, and in general ease the adoption of classroom technologies.
- To reinforce the vitality of the project-learning format, it may be appropriate to have academic content modules that would be a half semester. This would permit a math module to be used on one project team during the first half of the semester and the second module to be used on another project for the last half of the semester.