

Use of IDP at Michigan Tech - MiTechIDP

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Michigan Tech.



Michigan Tech.

Introduction of IDP at Michigan Tech

Multi-year process

2015 – Development and planning

- Prof. Tony Nunez, MSU shared best practices with our faculty and students
- A working group of faculty represented all schools and colleges reviewed IDPs (MSU, U of Mich, Wayne State, Yale, Wisconsin, government agencies, private orgs)
- Developed an IDP template and got faculty review

2016 - Pilot rolled out with a robust evaluation plan



Evaluation of IDP pilot

Strong support from students and faculty

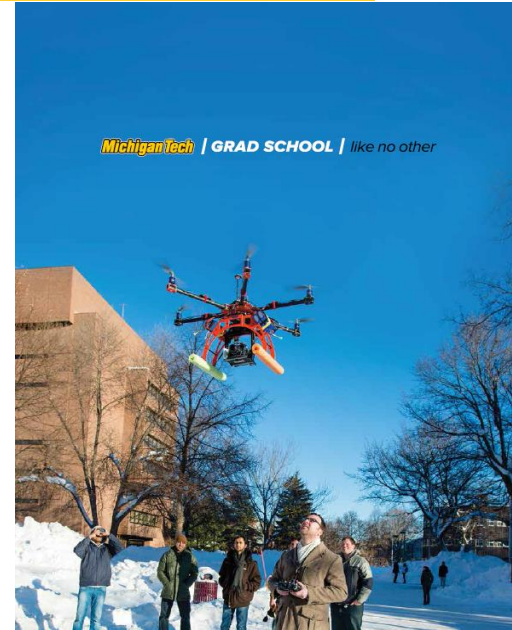
- Students:**
- more regular and more constructive communication with advisors
 - insight into questions to ask advisors
 - writing plans and expectations in writing

- Faculty:**
- improved communication with students
 - improved their ability to provide research advice and career advice

Recommendations:

- start the IDP process early, when student selects advisor
- organize IDP to align with student's progression in program – beginning and advanced students have different issues
- provide instructions for use of IDP
- emphasize reflection on PhD progression and career consideration by students; distribute to both faculty and students

- By Deans:**
- add processes for enhancing faculty mentoring; best practices on good advising/mentoring





Michigan Technological University
Graduate School

MiTechIDP for Research Graduate Students

Description of an IDP

Individual Development Plans (IDPs) are designed to help you to reflect on what you want to get out of your graduate education here, think of short-term and long-term goals, and explore your interests and career paths. It is a living planning document and should be modified as needed. The IDP is a tool to help identify goals, opportunities, and potential hurdles and discuss these with your advisor.

Importance of using an IDP

An IDP is a useful tool to help a graduate student and advisor:

- Reflect and develop a strategy for graduate education
- Manage their expectations and maintain a positive working relationship
- Minimize misunderstandings and conflicts

Suggestions for using this IDP

The MiTechIDP is presented as Word document so that you can add or remove questions to meet your needs. It may be printed or completed electronically. We suggest the following:

- The student should reflect on their career pathway and post-graduation plans and complete the left hand column in the time frame recommended (**highlighted in bold**).
- The advisor should read the sections completed by the student and provide feedback. Feedback could be provided by completing the right hand column of this document or another mechanism.
- The student and the advisor should plan to meet each semester, or more regularly, to review progress toward the goals outlined in the IDP.

Timeline for Academic Milestones – 1st semester

The table below is for the student and advisor to agree on a timeline for the milestones to complete the degree. Each student should complete the section(s) relevant to them. **It is recommended that you complete the timeline in the first semester and revisit it each year;** add any additional milestones that are relevant. The Graduate School maintains detailed web pages showing the timeline for various requirements for graduate degrees. See:

<http://www.mtu.edu/gradschool/policies-procedures/timelines/>

Academic Milestones	Year 1		Year 2		Year 3		Year 4		Year 5		Year 6	
	F	S	F	S	F	S	F	S	F	S	F	S
Students completing an MS degree will complete this section												
MS Coursework Complete												
MS Thesis/Report Draft												
MS Defense												
Students completing a PhD degree will complete this section												
PhD Coursework Complete												
PhD Qualifying Examination												
PhD Research Proposal Examination												
PhD Dissertation Draft												
PhD Dissertation Defense												
Relevant to all students												
Paper Submissions (number)												
Workshops and/coops/internships												
Conference Paper & Presentation												
Proposal Submissions												
Teaching (most applicable to PhDs)												

Student initials and date _____

Advisor initials and date _____



Graduate Program Planning – 1st semester

These questions help the student and advisor understand the student's overall goals, and how their education will help the student to achieve them. **It should be completed in the first semester.**

Questions for Student	Comments by Advisor
<p>What is your motivation for pursuing an MS or PhD degree? What are your career goals?</p> <ul style="list-style-type: none">••	<p>Comment on how the degree program will help fulfill your student's career goals. Should there be changes?</p> <ul style="list-style-type: none">••
<p>What do you want to be doing 3-5 years after completion, such as working in academia, industry or governmental service, or self-employed?</p> <ul style="list-style-type: none">••	<p>Comment on how the degree program will prepare your student for their 3-5 year goals.</p> <ul style="list-style-type: none">••
<p>What do you consider to be your major strengths and weaknesses in meeting the requirements of the degree you seek?</p> <ul style="list-style-type: none">••	<p>Comment on what you can contribute to maximize your student's strengths and help overcome any real or perceived weaknesses.</p> <ul style="list-style-type: none">••
<p>What actions do you want to undertake now to be better prepared after the completion of the degree?</p> <ul style="list-style-type: none">••	<p>Comment on how the actions can be fulfilled and what resources are needed to accomplish them.</p> <ul style="list-style-type: none">••

Research Focus – 2nd year

These questions are most appropriate after the research has begun, and before all of the coursework and qualifying examination are complete. Consider answering these questions in the second year of the program and revisiting as needed to refine and elaborate on them.

Questions for the Student	Comments by Advisor
<p>What are the hypotheses or goals of the research that you are undertaking?</p> <ul style="list-style-type: none">••	<p>Comment on how well your student understands the project fundamentals and whether the hypotheses and goals are realistic.</p> <ul style="list-style-type: none">••
<p>Which courses or research training are required for your research?</p> <ul style="list-style-type: none">••	<p>Comment on the preparedness of your student to undertake the research and what else is required to be successful.</p> <ul style="list-style-type: none">••
<p>What are your goals, timeline, and required resources for publishing in the literature and presenting at conferences?</p> <ul style="list-style-type: none">••	<p>Comment on your student's plans for publishing.</p> <ul style="list-style-type: none">••
<p>What are the major hurdles (such as time, equipment, supplies) to completing your research?</p> <ul style="list-style-type: none">••	<p>Comment on the appropriateness of the resources and the likelihood of them being available.</p> <ul style="list-style-type: none">••

Career Questions – 1-2 years before degree completion

These questions are most appropriate one to two years before degree completion. They should be considered in a timely manner so that the educational experience can prepare the student for their future career.

Questions for the Student	Comments by Advisor
<p>What do you consider to be your strengths specifically for your chosen career path?</p> <ul style="list-style-type: none">••	<p>Comment on how you perceive the student's strengths related to the chosen career path. Do you see strengths that are not listed?</p> <ul style="list-style-type: none">••
<p>What do you consider to be your weaknesses or lack of understanding specifically for your chosen career path?</p> <ul style="list-style-type: none">••	<p>Comment on your student's weaknesses or lack of understanding related to the chosen career path. Do you see any that are not listed?</p> <ul style="list-style-type: none">••
<p>During the upcoming 6 months, what professional growth opportunities and activities do you want to accomplish?</p> <ul style="list-style-type: none">••	<p>Comment on growth opportunities and activities of which your student may not be aware or that you suggest.</p> <ul style="list-style-type: none">••
<p>What type(s) of resources do you think are required for you to fulfill these professional growth opportunities?</p> <ul style="list-style-type: none">••	<p>Comment on the appropriateness of the resources and the likelihood of them being available.</p> <ul style="list-style-type: none">••

Beyond the PhD – 1-2 years before degree completion

After completion of a PhD degree, many students will need to develop skills to become an independent investigator. These questions will help students think about professional development beyond the PhD degree requirements. **PhD students should complete this section one to two years before completing their degree.**

Questions for the Student	Comments by Advisor
<p>Which funding agencies typically support your field of research and are you familiar with their funding requirements and proposal submission process?</p> <ul style="list-style-type: none">••	<p>Comment on how well your student understands the funding landscape and what needs to be done to better understand how to be competitive.</p> <ul style="list-style-type: none">••
<p>Do you have plans to submit a proposal or assist your advisor in preparing a proposal?</p> <ul style="list-style-type: none">••	<p>Comment on opportunities for your student to submit proposals. Do you need his/her assistance and in what way?</p> <ul style="list-style-type: none">••
<p>Describe plans to enrich your teaching portfolio.</p> <ul style="list-style-type: none">••	<p>Comment on teaching opportunities you anticipate for your student.</p> <ul style="list-style-type: none">••
<p>What sorts of feedback have you received on teaching? What are your strengths and weaknesses and plans for developing your skills?</p> <ul style="list-style-type: none">••	<p>Comments on how well your student understands their teaching strengths and weaknesses and planned development activities.</p> <ul style="list-style-type: none">••



Launch IDP to more programs

- **Volunteer programs** – Biology; Forestry; Biomedical Engineering; Mechanical Engineering; Kinesiology and Integrated Physiology
- Launched web page
- Seminar for new partners to exchange ideas with experienced faculty
- Invited ChemIDP organizers from American Chemical Society to give presentations to students and faculty
- Students and faculty will use MiTechIDP in Jan 2019



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- Pilot IDP students and faculty
- IDP working group – Friedrich, Engineering; Joshi, Biology; Carter, Kinesiology and Integrated Physiology; Storer, Forestry; Merz, Business; Bohmann, Electrical engineering
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Thank you!
Questions?

