

Indiana State University

2006 - 2007 Academic Annual Report

Department of Manufacturing & Construction Technology

Vision Statement

View/Modify Vision

Below is your vision statement from previous years. Please take this opportunity to review it and if necessary update it.

MCT Vision Statement: Continue to develop graduates with superior value-added education. This shall be accomplished by: 1) Instruction in well-equipped technical laboratories w/qualified full-time faculty. 2) Course work that continually maintains relevance--taught by faculty who continue to be involved in technical professional organizations. 3) Continuing to meet program accreditation standards. Proposed Learning Objectives: Knowledge MCT graduates shall be familiar with: 1) administrative systems and procedures. 2) basic principles of business and management relative to the major. Skills MCT graduates shall be able to: 1) communicate effectively. 2) think critically to solve industry problems. 3) demonstrate proficiency using information technology required by their specialization. 4) contribute to the development of new knowledge. 5) manage personnel and equipment. Values MCT graduates shall value: 1) safe and efficient use of personnel, equipment, and resources. 2) ethical solutions to industry problems.

Year in Review

Accomplishments

As you have heard, increasing public awareness of Indiana State University's accomplishments is crucial to building student enrollment, influencing policy makers, and developing a place of pre-eminence in the Midwest. What do you consider to be your department's accomplishments for the 2006-2007 year that will contribute to this effort? [Please list in priority order and limit to no more than 8.]

1. Two new faculty were hired to teach in the Construction Management program beginning fall, 2007. 2. Re-accreditation report: Faculty completed and submitted the two year NAIT re-accreditation report for the Manufacturing Technology and Computer Integrated Manufacturing (CIM)Technology programs. 3. Experiential Learning is a key part of all MCT programs. This year we had approximately 44 students do a cooperative work study/internship. 4. Articulation (transfer) agreements were updated with Ivy Tech and new agreements are being formed with many other two-year schools. 5. The student construction club was very active this year competing at the NAHB in Orlando, FL, hosting their annual golf outing to raise money for scholarships, participating in the T.H. Home Show, and completing a building project for the baseball team. 6. The construction management faculty hosted a very successful job fair for construction companies from across the country. There were 22 companies in attendance. 7. A construction management marketing/recruiting DVD was created. This was a year in the making. It turned out great and should help grow the program. 8. Getting two departments (MCT and ITE) to meet and discuss synergies and the possibility of reorganizing into one department. These departments will become one effective this fall. 9. Addressing the concerns of the program prioritization report. Progress was made in developing the B.S. in Technology Management degree which will bring together two other programs. Progress was also made in merging the Manufacturing Technology and CIM degrees.

Research and Scholarship

What is your assessment of accomplishments in the area of research and scholarship that is focused primarily on contributions to practice and discipline-based scholarship? Are you satisfied overall? In which areas do you feel your department does particularly well? In which areas do you feel your department needs to improve?

During 2006-2007 MCT faculty had two publications, presented four papers at conferences and received five grants. They held leadership positions both on and off campus. I believe given the teaching loads, advising, and service responsibilities faculty are doing pretty well. I would like to see more faculty doing research and scholarship and I will continue to encourage this. I believe the department is doing pretty well in papers presented. In particular, I believe our graduate faculty need to increase their level of research and scholarship.

Grants, Contracts & Off Campus Professional Service

What is your assessment of accomplishments in the area of grants, contracts, and off campus professional service? Are you satisfied overall? In which areas do you feel your department does particularly well? In which areas do you feel your department needs to improve?

Faculty in the MCT department submitted a few grants in 2006-2007. It would be nice to see more faculty involved in grant writing. Off campus professional service includes offices held in regional, national and international organizations and several committee memberships. I am pleased with the level of off campus service for most MCT faculty. I believe we are doing off campus service very well. We can improve in grant writing.

Teaching

We would like to highlight innovative approaches to teaching. Has your department developed any pedagogies or practices you'd like to share with us? Please describe briefly.

Four faculty in the MCT department are involved in the Ph.D. in Technology Management program which is becoming an eminent program. We also have an undergraduate degree in Industrial Supervision that is a Degree Link program. This program was redesigned to become a B.S. in Technology Management and allow for easy articulation from two year schools. I anticipate this program will satisfy a real need in Indiana and will grow into an eminent program. Both of these programs involve innovative approaches to teaching as they use distance education technology. The program in Computer Integrated Manufacturing has installed cameras in the CIM lab and is developing the iLearnTek system so students around the world will have access to the lab resources under adult supervision. This program has real potential to grow, especially given the push in Indiana for advanced manufacturing. Two of our courses (MCT 131 and MCT 133 are involved in the Learning Communities program.

Course Scheduling/Enrollment Management

How is the department making sure that students are able to get the classes they need to graduate in a timely manner?

The biggest challenge is not having enough faculty in order to keep class size to a reasonable level. Also having faculty with the proper expertise for certain classes. These things create challenges in scheduling courses. This year we were successful in hiring two new TT faculty to teach in the construction management program beginning in fall, 2007. I was also able to hire a one-year full time temporary faculty and hire adjuncts with proper expertise to teach classes. Low enrolled classes also present a challenge. Low enrolled classes were cancelled and alternative arrangements were made for students to learn the content. In some cases faculty agreed to work with the student in a TBA arrangement to help the student receive the content knowledge. We want students to take their courses here at ISU but in the event this is not possible we work with them to schedule courses at

Ivy Tech or the Indiana College Network that will substitute here at ISU.

Outreach

What are the outreach opportunities for your discipline? (non-traditional modes of delivery and timing, etc)

1. Faculty in the MCT department teach courses, advise students and serve on committees for the Ph.D. in Technology Management Program. This is a web-based distance education program. 2. We have an undergraduate Degree Link program in Industrial Supervision. This is a distance education program geared toward people with a degree (A.S. or A.A.S.) in a technical area that are working and want to further their education by completing a B.S. degree. This degree was strengthened this year with Ivy Tech and is being transformed into a Technology Management degree to better meet the needs of their students. We expect it to be very popular. 3. The MCT department also shares the MS in Industrial Technology program that is a web-based program. 4. MCT faculty and students are involved in other outreach activities such as the Vigo County Explorer Program. 5. I believe there are many opportunities for faculty to do consulting.

Assessment

Please share your stated student learning outcomes.

We have student learning outcomes that are listed in our mission statement: Proposed Learning Objectives: Knowledge MCT graduates shall be familiar with: 1) administrative systems and procedures. 2) basic principles of business and management relative to the major. Skills MCT graduates shall be able to: 1) communicate effectively. 2) think critically to solve industry problems. 3) demonstrate proficiency using information technology required by their specialization. 4) contribute to the development of new knowledge. 5) manage personnel and equipment. Values MCT graduates shall value: 1) safe and efficient use of personnel, equipment, and resources. 2) ethical solutions to industry problems. In addition, each program has its own student learning outcomes, some of which are directed by the accrediting agency.

Strategic Initiatives

Community Engagement I

Please summarize your faculty's efforts in community engagement this year.

1. Cooperative Education/Internship is required in the construction management and the industrial supervision programs. It is strongly encouraged in other programs in the department. About 44 students completed a co-op/internship this past year. Faculty work hard to help place students in these situations by coordinating on-campus interviews, contacting employers, writing letters, etc... 2. Faculty and students participated in building a Habitat for Humanity home, which is a community service project, and other activities such as this. Construction club faculty and students built lockers for the ISU baseball team and participated in the T.H. Home Show. 3. Faculty participated in a Faculty Fellows grant called the Explorer Program that involved several ISU students, Middle and High School students and around 21 industry and education partners. 4. The department has two active advisory boards, one for the manufacturing related programs and one in construction management. 5. We started what we hope to be a yearly Speaker Series and invited the public to attend. This year we had two speakers, Nick Billotti, President and CEO of Turner International Construction Co., and Ms. Margaret Hanley, President of A. Lucas & Steel company to speak to students, faculty and the public of Terre Haute.

Experiential Learning

What is your vision for experiential learning in your department?

1. Due to the nature of our programs we must maintain a strong cooperative work study/internship program to supplement the education students receive at ISU. This is an extension of learning beyond the university walls and into the community. We require an internship in two of our programs and within the next few years it will be required in all of our programs. 2. We must continue to work with the community in every way possible because it creates a good situation for everyone involved and many good things can happen as a result. 3. We must get some financial support, in the form of grants, to support our work in experiential learning and the community. Most of these activities involve time, planning, organization, materials, etc.. that require financial resources. 4. All of the programs in the MCT department have always seen experiential learning activities as a vital part of the future of our department

Fundraising Activities

What steps have you taken to support fundraising activities in your department? How can your efforts be supported?

We work closely with the College of Technology development officer in support of development activities. We attend functions such as the Emeriti Breakfast, the Terre Haute Air Show, Honor Day activities and other events in support of development. Not only do these events honor current students they also honor prominent alumni who are in a position to give back to the university. The MCT website promotes our advisory boards, alumni and now has a link for alumni to update their personal information. We support student club fundraising efforts. This year our student construction club members held a construction job fair and a golf outing to raise money for scholarships and to support travel to regional and national competitions, among other things. MCT faculty are always interested in developing relationships with alumni and friends of Indiana State University.

Quality

Quality

Please provide 1-2 suggestions to increase the ability of your department or the University to meet the criteria above.

1. Quality begins with the faculty. We must retain the good faculty we have worked so hard to attract to ISU. One way to do this is to financially reward faculty who work hard by having yearly raises, market adjustments and other incentives. Also, we must be allowed to hire good faculty with competitive salaries. 2. The COT has reorganized from 5 departments to 3 allowing us to reallocate our resources, improve the quality of education and respond to future challenges and opportunities. 3. This year faculty in the department received (in-kind gifts) over \$605,000 of computer software used in the industry. This will enhance student learning and teaching effectiveness.

Feedback

This section is to allow you to share your ideas for enhancing enrollment, dealing with budget and other challenges facing the university community.

1. We are losing good faculty for a number of reasons. We must find a way to financially reward faculty who work hard otherwise this will continue to be a problem. 2. ISU needs to establish a bigger presence in the Indianapolis area. It is my understanding a very small percent of our student population comes from Indy. 3. Make a better connection with two-year schools and community colleges for easy transfer. 4. Develop an atmosphere of a more friendly and helpful university in all divisions of the university that will allow us to retain more of the students we currently have and

attract others. 5. Stop doing the things that aren't working and direct financial resources into areas that are growing. Some programs could grow if more resources were made available.