I. INTRODUCTION

A. ACCREDITATION

1. Name of regional organization by which the institution is accredited.

Indiana State University is accredited by the North Central Association of Colleges and Secondary Schools to offer bachelors and master's degrees, the Educational Specialist degree, Doctor of Philosophy, and the Doctor of Psychology degrees. Current accreditation was awarded in 2000 for ten years.

2. Is the construction program or a portion thereof, accredited by another accrediting agency?

No

3. List accrediting agencies that currently accredit programs at the institution.

Indiana State University is accredited by the National Council for Accreditation of Teacher Education and Indiana Professional Standards Board to offer curricula for preschool through secondary level, and school services personnel at the bachelor's, master's, educational specialist, and the doctoral degree level.

The Speech-Language Pathology programs are accredited by the Educational Training Board of the American Board of Examiners in Speech Pathology and Audiology of the American Speech-Language-Hearing Association.

The Doctor of Psychology program in Clinical Psychology and the Ph.D. program in Guidance and Psychological Services, with specializations in School Psychology and in Counseling Psychology, are accredited by the American Psychological Association.

The School of Business programs are accredited by the American Assembly of Collegiate Schools of Business.

The School of Education program in Marriage and Family Therapy is accredited by the American Association for Marriage and Family Therapy.

The School of Nursing is approved by the Indiana State Board of Nursing. The associate degree program is accredited by the National League for Nursing Board of Review for Associate Degree Programs and the baccalaureate degree program is accredited by the National League for Nursing Board of Review for Baccalaureate and Higher Degree Programs. The Continuing Education Program is accredited as a provider by the American Nurses Credentialing Center's Commission on Accreditation.

In the School of Health and Human Performance, the Athletic Training Program is accredited by the National Athletic Trainers Association. Further, the Environmental Health Science Program is fully accredited by the National Environmental Health Association and the Safety Management Program is fully accredited by the American Society of Safety Engineers. Finally, the recreation programs are accredited by the National Recreation and Parks Association / American Alliance for Leisure and Recreation.

In the School of Technology, the industrial technology programs are accredited by the National Association of Industrial Technology.

Beyond accreditations mentioned above, programs in the College of Arts and Sciences have received recognition by the following organizations: American Chemical Society, National Accrediting Agency for Clinical Laboratory Sciences, Committee on Allied Health Education and Accreditation of the American Medical Association, National Association of Schools of Art and Design, National Association of Schools of Music, American Dietetic Association, American Association of Family and Consumer Sciences, National Council of Teachers of English, the Public Relations Society of America, and the Council on Social Work.

Indiana State University holds memberships in various other educational and professional organizations, including the American Association of Colleges for Teacher Education, the American Association of State Colleges and Universities, the American Council on Education, the Midwestern Association of Graduate Schools, the Council of Graduate Schools in the United States, the American Association of University Women, the College Entrance Examination Board, the American Association of Collegiate Registrars and Admission Officers, the Association of College Admissions Counselors, and the National Association for Foreign Student Affairs. It is also on the approved list of the Association of American Universities.

B. INSTITUTION

1. History

Indiana State University has a rich heritage and its growth and development are mirrored in the progress of higher education in the State of Indiana. The original enabling Act creating Indiana State Normal School was passed by the Special Session of the 1865 General Assembly. The responsibility for establishing and operating the school was delegated to a four-member board of trustees appointed by the Governor (subject to confirmation by the State Senate) plus the State Superintendent of Public Instruction serving as an ex-officio member.

The original purpose of the institution, as designated by the General Assembly, "shall be the preparation of teachers for teaching in the common schools of Indiana." The Normal School opened on January 6, 1870, with 21 students in attendance. The faculty consisted of President W. A. Jones and four professors. Only two floors of the building were finished, and there was only "the most necessary furniture and absolutely no equipment." There was no "semblance of a laboratory, not a map, not a piece of apparatus of any description." From this humble beginning, Indiana State has grown and developed into the University which we now know.

During the first thirty years of its operation, the majority of the students attending Indiana State Normal School were not high school graduates. In 1907, a high school diploma was made a requirement for all teaching certificates in Indiana. Since 1908, graduation from a commissioned high school or the equivalent has been required for admission to Indiana State.

In 1907, a college course was established in the Normal School, and the first bachelor's degrees were awarded to five students in 1908. In 1924, all courses in the Normal School, except non-prepared courses, were raised to the college level and were accepted to apply on the bachelor's degree.

As a part of the growth of higher education in the State, Indiana State Normal, Eastern Division, was established in 1918 in Muncie, Indiana. In 1929, the Eastern Division became Ball State Teachers College. After Ball State (now Ball State University) became an autonomous institution, both colleges remained under the jurisdiction of the same board of trustees.

A "graduate school" was established in 1927, and the first master's degrees were awarded to five students in 1928. In 1929, the General Assembly changed the name of the institution to Indiana State Teachers College, and the board of trustees was named the State Teachers College Board. Board membership and the method of appointment remained unchanged from the provision in

the 1865 statute. The change in name at this time reflected the evolving role and growth of the institution.

In 1946, Indiana State Teachers College entered into a cooperative program with the Indiana State University School of Education for the Ed.D. degree, and two of the three years of study toward this degree could be completed at Indiana State University. In 1959, the University awarded its first Advanced Degrees in Education (Ed.A.), which subsequently was titled the Educational Specialist Degree (Ed.S.).

The Doctor of Philosophy degree in Technology Management was approved by the Commission of Higher Education with its first graduate in May, 2000.

The school became Indiana State College by an act of the 1961 General Assembly and, for the first time since the creation of Ball State, had a separate board of trustees. The size of the board was increased from four to six members, and the Superintendent of Public Instruction was to serve as an ex-officio member. Three statutory stipulations were placed on the composition of the board: (1) at least one member of the board had to be a woman, (2) at least one member of the board had to be a resident of Vigo County, and (3) two of the six members had to be nominated by the University Alumni Council and those so chosen for nomination to the Governor had to have completed a prescribed course of study at Indiana State. Board members are appointed for four-year terms but are eligible for reappointment. The 1971 General Assembly removed the State Superintendent from the Board and gave the Governor authority to appoint an additional trustee to fill the position (Senate Enrolled Action. 249, effective March 5, 1971). Senate Enrolled Action No. 10 of the Acts of 1975 provided for the appointment of a student trustee and Senate Enrolled Action No. 111 of the Actions of 1976 provided an additional trustee and stipulated that "at least one member of the board shall be a resident of Vanderburgh County." Thus, there are now nine appointed trustees, two of whom are nominated by the Alumni Council and one nominated by a search and screen committee consisting of one representative of the governor and at least four students chosen by the elected student government representatives, including at least one student from each campus of the university.

Academic reorganization and broadened study opportunities resulted in the establishment of the School of Education in 1960, School of Graduate Studies in 1961, College of Arts and Sciences in 1962, School of Nursing in 1962, School of Business in 1964, and the School of Health, Physical Education, and Recreation in 1965. The University's own doctoral study program was started in 1965, and the first doctoral degrees were conferred in June 1967. The School of Technology was established in 1967. A number of research and service centers were established during the period 1960 to the present. These are described in appropriate portions of the University catalogs.

The 1965 regular session of the General Assembly changed the name of the school to its present designation -- Indiana State University. The second special session of that Assembly enacted a resolution memorializing Indiana State and the other State higher education institutions to do all things necessary for the creation of a four-year state-assisted college at Evansville. Indiana State assumed the primary responsibility for this development of the Evansville institution. The 1967 and subsequent General Assemblies have appropriated funds to Indiana State for the continued development of the Evansville campus.

The Indiana State University Evansville campus was opened in 1965 and has progressively grown to a separately accredited institution of higher education offering degrees in a broad range of general arts and sciences and career-related programs. Opportunities for study are available in allied health, business, education, engineering technology, humanities, science and mathematics and social sciences. Non-credit, community service and special programs are offered throughout the year by the ISUE Office of Continuing Education. The campus is located on a beautiful 300-acre site between Evansville and Mt. Vernon, Indiana. The Evansville

campus achieved independent status through the Indiana Legislature in 1985 and became the University of Southern Indiana.

Throughout the growth of Indiana State -- whose centennial was observed in 1970 -- the institutional integrity has been maintained by the Indiana General Assembly. In every name change, all powers, rights, duties, and obligations of the preceding Board of Trustees were transferred to its successor. The continuity of the Trustees has been maintained as the presentation of specific duties bestowed by law indicates.

Since its establishment, the University has had ten presidents and one acting president with the sitting president, Lloyd W. Benjamin III, 2000 to present.

2. *Indiana State University Mission Statement*

"Indiana State University, a doctoral research university, combines a tradition of strong undergraduate and graduate education with a focus on community and public service. We integrate teaching, research, and creative activity in an engaging, challenging, and supportive learning environment to prepare productive citizens for Indiana and the world."

3. *Indiana State University Value Statements*

- We value high standards for learning, teaching, and inquiry.
- We provide a well-rounded education that integrates professional preparation and study in the arts and sciences with co-curricular involvement.
- We demonstrate integrity through honesty, civility, and fairness.
- We embrace the diversity of individuals, ideas, and expressions.
- We foster personal growth within an environment in which every individual matters.
- We uphold the responsibility of University citizenship.
- We exercise stewardship of our global community.

4. *College of Technology Mission Statement*

"The College of Technology will provide exemplary undergraduate and graduate programs, generate solutions and knowledge through research, and serve the technology needs of the State, the nation, and the international community."

The Commission for Higher Education in Indiana has issued a report titled, "Reaching Higher: Strategic Directions for Higher Education in Indiana." It mentions Indiana State University and the College of Technology as follows:

"Indiana State University should continue as a unique institution recognized for excellence in experiential learning and engagement, having a strong reputation of supporting transfer articulations from two-year colleges, particularly in technology program articulations, having extensive undergraduate offerings and selected masters and doctoral programs primarily in professional areas, and being a leader in forming collaboration across public, business, and education sectors."

5. Size

Indiana State University, established in 1865, first opened its doors to students in 1870. During more than a century of distinguished service, the University has become widely recognized for the outstanding quality of its programs, facilities, staff, and graduates. As a multi-purpose University, Indiana State provides a great variety of higher education opportunities.

The 91-acre main campus, located in mid-town Terre Haute, Indiana, is modern, compact, and attractive, offering a pleasant blending of academic, residence hall, and other facilities. Expansion and development, within the past 15 years, has resulted in more than 90 percent of the facilities being newly constructed or extensively remodeled. The University maintains several other auxiliary sites in the Terre Haute area dedicated to housing, study, sports, and recreation.

Number of Students Enrolled.....(Spring 2008):

Total.....9,452

Undergraduate 7,494

Graduate 1,958

Number of Faculty .....(Fall 2007):

Professor.....140

Associate Professor.....124

Assistant Professor 173

Special Purpose 56

Part Time Temporary.....217

Total.....710

6. Organizational Structure

The organizational chart for the University can be found in the appendix and at the following link:

http://www.indstate.edu/adminaff/docs/Visio-ISU_ORG_Chart2008March.pdf

C. CONSTRUCTION UNIT

1. History

The initial developmental activities for Indiana State University began after approval to study the feasibility of a Construction Technology (now Management) degree was obtained from the Indiana State University Academic Planning Council during the 1969/70 academic year. When approved for a feasibility study, the program was also placed in the Campus Master Plan to be submitted to the Indiana Commission for Higher Education in the 1975/76 academic year. During the 1970 fall semester, Professor Charles Carlock began investigating the need for a formalized program in Construction Technology (now Management). At that time, while courses in construction were already offered in the Department of Industrial Technology, no formal construction degree was available.

Professor Carlock's initial investigation included a needs and curriculum assessment of 31 similar programs across the United States. Of the 31 programs contacted, 26 programs responded with programmatic information which was then used in the initial development of a 52 hour major in Construction Technology at Indiana State University. The development of the

52 hour requirement was based both on the information received from the 26 responding construction programs and also on the "Educational Goals and Recommended Construction Curricula for the Construction Industry" document which was developed jointly by the Associated Schools of Construction and the Associated General Contractors of America, Inc. and adopted by the latter in 1968.

After the initial feasibility study, a request was submitted to move up the date for submission to the Indiana Commission for Higher Education for planning approval during the 1974/75 academic year. This request was granted in November of 1974. The formal program proposal, by then a 62 hour major in Construction Technology (now Management), was developed for submission and approval by the appropriate campus committees. In March, 1975 the University Academic Planning Council approved the proposal for a Bachelor of Science Degree in Construction Technology (now Management) and the approval process through the appropriate University committees was begun.

Approval by all required campus committees was obtained by the early fall, 1975 and the proposal was then forwarded to the Indiana Commission for Higher Education for approval. Final approval for the Construction Technology (now Management) program was received on January 9, 1976. This allowed the initial official offering of the first two years of the curriculum during the fall semester, 1976. On December 18, 1976, the first Bachelor of Science Degree in Construction Technology was awarded.

In the fall semester of 1977 Professor Bill Davis joined the faculty as director of the four-year Construction Program. Professor Davis was formerly Department Chairman for Construction Technology at the Indianapolis campus of Purdue University and had been active in the Associated Schools of Construction. Professor Davis developed and taught the architectural and construction management courses until his retirement, in 1992.

Indiana State University was accepted into the Associated Schools of Construction membership in 1978. On April 4, 1979, Indiana State University's Construction Program was granted the first Associated General Contractor's Student Chapter Charter in the State of Indiana. The National Home Builders Association Charter for a student chapter followed in 1983.

Dr. Bruce Dallman came to Indiana State University from Eastern Michigan University in July, 1984. Professor Dallman was chairman of the Manufacturing and Construction Technology until July of 1990 when he assumed a full-time teaching position in the Construction Program.

In August 1991, Dr. Joseph G. Huber joined the Construction Program faculty following teaching experiences at Pennsylvania State University and the University of Kansas. Prior to joining academia, Dr. Huber owned and operated a general contracting business with membership in AGC of America and served many years with the US Army Corps of Engineers. Dr. Huber retired in 2007.

Following several years of utilizing adjunct and temporary (non-tenure track) faculty to teach the architectural courses originally taught by Professor Bill Davis, Dr. Lee Ellingson joined the Construction Program faculty, in August 1997. Dr. Ellingson has twenty years of experience as a registered, practicing architect. He received his Ph.D. in 1997 from Texas A&M University.

In August 1999, Denise Gravitt joined the Construction Program to teach the engineering sequence of courses. She received a doctorate in Technology Management during her tenure here. In the fall of 2007, Dr. Gravitt left to teach at Western Kentucky University.

Beginning in 2000, Donald McNabb, an award winning homebuilder, joined the Construction Program faculty as a one-year temporary appointee to teach courses in supervision, methods,

estimating, and scheduling. In 2005, he was granted a three-year contract and is currently working on a master's degree.

In the fall of 2006, Dr. Bashar Haddad joined the faculty to teach the engineering courses. He has over three years of international construction experience, an MBA, and a Ph.D. in Technology Management. In the fall of 2007, Dr. Haddad returned to his home country, Jordan.

In the fall of 2007, Dr. Chul S. Kim and Dr. John Reposa joined the construction faculty. Dr. Kim had been teaching in the construction program at IUPUI. He has nine years of teaching experience and eight years of experience in design and construction. He has a master's degree in architecture and a doctorate degree in Civil Engineering with an emphasis on building design, CAD, and construction information technology.

Dr. Reposa had been teaching in the construction program at Missouri State University. He has a Ph.D. in Civil Engineering and an M.S. in Construction Management with over ten years of teaching experience. He also has twenty years of experience in the design and construction of power plants, residential subdivisions and Storm water management facilities with overseas experience in both heavy and light construction with the Corps of Engineers.

In the fall of 2008, Dr. Richard Baker joined the construction faculty. Dr. Baker is a senior systems professional with wide experience in multiple industries. His areas of expertise are leadership, team building, strategic business planning, change management, and information management. From 2002 to 2007 he worked as a senior director for Turner Construction to set the information technology vision and strategy. He was responsible for strategy and implementation of Building Information Modeling in 3D and 4D models.

2. *Mission Statement (Approved March 16, 2001)*

The mission of the Construction Management Program at Indiana State University is to provide the knowledge, skills, and values to enable graduates to become leaders in the construction industry and responsible members of society.

3. *Goals (Approved March 16, 2001)*

- Provide management and supervisory personnel for the construction industry.
- Provide the student with a balanced program in different disciplines for construction including architecture, engineering, methods of construction, and project management.

4. *Program Size*

The following table lists the number of majors and graduates from the Construction Management Program for the last six years:

Table 1: CM Enrollment and Graduate Data

Construction Management Enrollment and Graduate Data												
	F01	S02	F02	S03	F03	S04	F04	S05	F05	S06	F06	S07
# Majors	150	138	145	132	143	137	133	125	136	130	145	123
# Grads*	15		33		33		27		31		23	
*Graduate totals are for the academic year.												

5. Organizational Structure

Beginning in the academic year of 2007-2008, the College of Technology will have three departments instead of five. Therefore, the Construction Management Program will be in a larger department beginning in the fall of 2007. This change was made to make the College more efficient and to promote more shared resources between programs.

6. Program Objectives

In the fall of 2007, the construction faculty approved a new list of objectives that more closely correspond to the ACCE list of required subject areas. The objectives are listed below. In addition to the objectives, the construction faculty have developed measurable outcomes for each objective. A complete list may be found in the appendix.

a) The student will communicate effectively.

b) The student will be aware of important ethical considerations in the construction industry.

c) The student will know basic scientific theory and analytic procedures.

d) The student will have mathematical skills.

e) The student will be familiar with basic business and management concepts.

f) The student will be familiar with design theory.

g) The student will be familiar with the analysis and design of building systems.

h) The student will be familiar with construction materials and methods.

i) The student will be familiar with construction graphics.

j) The student will have basic surveying skills.

k) The student will be familiar with estimating procedures.

l) The student will be familiar with planning and scheduling.

m) The student will be familiar with construction accounting and finance.

n) The student will know some of the basics of construction law.

o) The student will be familiar with basic safety requirements.

p) The student will be familiar with the basic procedures of project management.

7. Levels of Assessment and Implementation

a) University admission assessment

(1) High school standing

Freshmen candidates applying directly from high school must maintain a competitive grade point average of 2.5 or higher on a 4.0 scale. Students completing GED

diplomas are also given admission consideration based upon percentile rank, schooling completed, and additional standardized test scores.

(2) Test scores

All Indiana high school graduates must pass both the mathematics and English sections of ISTEP or receive an official waiver from their high school to gain admission to the University.

(3) Completion of Core 40

High school students are expected to complete the Indiana Core 40 curriculum which includes language arts, mathematics, science, social science, directed electives, undirected electives, physical education, and health/safety.

b) Program assessment

(1) Employer (Host) internship evaluation

(2) Senior Surveys

(3) Capstone Project

c) Post graduate assessment

(1) Alumni survey

(2) Consultation with Advisory Board members

II. ORGANIZATION AND ADMINISTRATION

A. ORGANIZATIONAL CHARTS

1. Provide organizational charts for the institution, which describe the place of the construction unit within the institution's administrative structure.

Beginning in the fall, 2007, the College of Technology adopted a new three-department structure in lieu of the old five-department structure. The Construction Management Program is now located in the Department of Technology Management. Organization charts are provided for the College of Technology and the University are enclosed herein.

2. Indicate the names of incumbents in positions directly related to the construction unit.

Board of Trustees

Mike J. Alley, President
Ron Carpenter, Vice President
Richard Shagley,
Norman L Lowery
Barbara House
R. Brooks LaPlante
George Pillow
John Thyen
Amy Huntsinger, student trustee

University President: Lloyd W. Benjamin III, (through spring, 2008)

Provost and Vice President for Academic Affairs: C. Jack Maynard

Dean, College of Technology: W. Tad Foster

Chair, Department of Technology Management: James Smallwood

B. CONSTRUCTION UNIT ADMINISTRATION

1. Administrator of the construction unit

Dr. James Smallwood, Chair, Department of Technology Management

2. Describe the administrative procedures of the construction unit and, if pertinent, the next higher administrative unit with regard to:

a) Curriculum

During the academic year, 1990 – 2000, the construction faculty held meetings twice monthly to review Program mission statement, goals, objectives, and outcomes. The mission statement and goals were written to be compatible with the mission statements and goals of the College of Technology and the University.

Program objectives were based on faculty recommendations, existing courses, ACCE requirements, requirements of the office of Academic Affairs at ISU, and recommendations from the advisory board. The construction faculty approved sixteen objectives with

appropriate sub-objectives or outcomes. The outcomes were written to be testable. The objectives are included in both the alumni and senior surveys to provide feedback on how well the objectives are being met.

Construction faculty members have developed a spreadsheet which plots the Program outcomes against the courses offered by the Program. This helps the faculty to determine which courses are required and what needs to be taught in each course.

The construction faculty meet periodically (typically biweekly) to discuss important issues. Curriculum is a standing agenda item in these meetings. Faculty members often present what is going well or not going well in their courses. This helps the Program to identify any necessary changes in prerequisites or course content. For instance, Statics and Strength of Materials was altered slightly in 2006 to more accurately reflect what construction managers need to know rather than engineers. In the fall of 2007, the College of Technology hosted a curriculum workshop retreat where all faculty met for 2 ½ days to revise curriculum and exploit any "synergies" there might be between programs. The CM Program replaced the MCT (Manufacturing and Construction Technology) prefix with CNST (Construction). Moreover, some course descriptions, prerequisites, and the course rollout were modified.

Whenever a new faculty member comes on board, the strengths, knowledge base, and talents of that faculty member are assessed to determine how the curriculum might be revised or adjusted to maximize the contributions of that faculty member.

Construction faculty often attend workshops offered by the Center for Instruction, Research, and Technology (CIRT). This is especially recommended for new faculty members. A small stipend is usually provided to encourage participation. A few examples of workshops offered by the CIRT are:

- Using the Best Practices with the Best Tools
- Teaching in an Online Environment
- Instructional Technologies Series
- Research and Data Analysis Tools

Faculty regularly attend regional and national conferences sponsored by the Associated Schools of Construction (ASC) and other associations such as the National Association of Industrial Technology (NAIT). Faculty are encouraged to publish and present papers at these conferences. Topics frequently are about course delivery and content, which improves performance. Seeing and reading other presentations are also good learning opportunities. Networking with colleagues is invaluable for curriculum issues.

All curriculum changes (except for minor editorial changes) must go through a rigorous review and approval process established by the office of Academic Affairs. The approved procedures are published in the Curriculum Approval Procedures (CAPS) Manual, which can be located at:

http://www.indstate.edu/acad-aff/caps_manual_2008/

Programs at ISU often share courses with other programs, so any course or program revisions must be approved at all levels. This is to assure that proposals:

- Support the mission of the department, college, and Indiana State University;
- Adhere to the standards and requirements of units at various levels in such areas as admission, retention, program requirements, and graduation;

- Account for resources at levels sufficient to support programming and to maintain quality over the long-term;
- Are allocated resources consistent with the priorities of the department and college;
- Are integrated and coordinated with other offerings and the interests and needs of other academic units; and
- Are presented in a clear, accurate, and complete manner in accordance with established University publications standards and formats.

The curriculum revision process is summarized in the College of Technology Curriculum Routing Guide (see Appendix). In brief, the construction faculty must approve proposed changes; the Department chair must approve the changes; consultation forms (F4) must be sent to any other unit on campus for approval that might be affected by the changes; the College of Technology (COT) Academic Affairs Committee must approve; the Dean of the COT must approve; and finally the Provost must approve.

b) Faculty

Faculty Hiring

New faculty searches must be approved by the department chair, the Dean of the College, and the Provost. These approvals are based on need and available resources. In order to recruit the best faculty possible, all searches are a coordinated effort of the search committee, the Office of Academic Affairs, and Affirmative Action. Strict procedures must be followed. Beginning in 2006/2007, the University began using a new online Applicant Tracking System (ATS) to facilitate all faculty searches. The ATS, guidelines, and forms can be located at:

http://www1.indstate.edu/humres/employment.htm

The first step is to establish need and get approval. The next step is to establish a search committee. Search committees are selected based on diversity and content knowledge. The next step is to select a search committee chair. The chair has the responsibility of meeting all ISU guidelines, submitting appropriate forms, creating an effective advertising campaign, chairing meetings, meeting all deadlines, and coordinating interviews. Position announcements for construction are typically placed in:

- The Career Center web site;
- National Association of Women in Construction (NAWIC) magazine and web site;
- Chronicle of higher Education; and
- Associated Schools of Construction (ASC) list serve.

ISU typically provides $2,500 for regular faculty searches.

When the applications are received, the search committee evaluates each applicant based on the advertised criteria and may conduct telephone interviews with promising applicants. Then the Committee forwards recommendations to the department chair. With the agreement of the chair and department faculty, the committee's recommendations are forwarded to the Dean of the College.

After approval of the Dean, selected candidates are invited to the campus for personal interviews. The search committee interviews each candidate and invites department faculty to participate in the interviews. Time is allocated interviews with the department chair and dean. Applicants are frequently asked to guest lecture so the Committee can verify presentation and teaching ability.

At the conclusion of the interview process, candidates are rank ordered with justifications and forwarded to the department chair and college dean for final approval. Non-selected candidates are then notified by the department chair. The Dean of the College negotiates starting date, salary, and duties with the final candidate and forwards the recommendation to the Provost and Vice President for Academic Affairs.

The final decision to recommend a candidate for appointment by the Board of Trustees is made by the President, the Provost and Vice President for Academic Affairs, the appropriate academic dean, the department chair, and the department faculty.

Assignment of Teaching Loads

Faculty teaching assignments are based on faculty content knowledge, departmental schedule requirements, the nature of the courses taught, and to some extent, non-teaching assignments. The official University teaching load is twelve credit-hours per semester; however, this may be reduced in respect to other activities such as research and administrative duties. Contact hours may vary depending on whether a course is a lecture or laboratory. Consideration is also given to the number of preparations required of the faculty member. All final decisions concerning teaching loads are made by the department chair in consultation with the Dean of the College.

c) Facilities

The CM Program has two areas in the Technology "A" building that are dedicated to the Program. These include rooms 214-218 and rooms 122-129. The suite of rooms, TA 214-218, houses a 24-station computer lab used for CAD, estimating, scheduling, and assorted software, model making room, printer alcove, two faculty offices, and a library alcove. The suite of rooms, TA 122-129, houses the construction lab, an anteroom, a classroom, tool storage area, and a secure room for storing surveying equipment. The construction lab has a large overhead door which opens onto a fenced staging area. The CM Program also has a small storage room for equipment, TA 119.

In addition to the dedicated construction areas, the CM Program also uses classrooms that are available to other programs in the College. These include the old packaging and plastics lab, TA 204, that has been converted to a "technology-ready" classroom. Part of this area is dedicated to four-poster drafting tables for layout of working drawings that can be used for take-offs and estimating. TC 303 and TC 025 are standard classrooms that are available for construction classes. TC 212 is an information technology classroom that is used to teach MCT 295, a general-purpose computer course. And finally, TC 105, or Kicklighter Hall is a large auditorium-style classroom that is available for large classes such as MCT 133, Introduction to Construction Management.

Most classrooms at ISU are now "technology-ready". These classrooms are equipped with a high-speed internet connection and audio and video equipment.

Assignment of the facilities listed above is made by the department chair.

Class sizes are determined by how many seats or workstations are available and how many students can be reasonably accommodated by one instructor. Lab courses which require more one-on-one instruction are limited more than a lecture course. The Architectural Lab, TA 214, is limited to 24 workstations.

d) Budget

Annually, the College of Technology allocates approximately $53,106 to the Department of Manufacturing and Construction Technology for faculty travel, student wages, laboratory and office supplies, and equipment. The Department's budget committee, with membership form each academic program, provides recommended allocations to the department chair. Department expenditures for the academic year, 2007-2008, were as follows:

Table 2: Department Expenditures

Academic Program	Travel	Student Wages	Supplies	Equipment
Construction & Architecture	4000	1136	3002	4027
Manufacturing & Metals	6739	1622	6739	12000
Totals	10,739	2758	9741	16,027

Salaries are determined upon initial appointment. The following statements of policy are taken from the University Handbook (2001):

"The ISU Board of Trustees annually reviews and approves salary guidelines. Guidelines for salary increases, salary structures, and performance criteria are established annually by the University President in consultation with the vice presidents to achieve University objectives and provide for individual growth and reward. It is the objective of the compensation program to maintain salaries which are comparable to and competitive with similar positions in other higher educational institutions and local industry. Budgeted funds for compensation are of necessity dependent upon resources available from state appropriations."

"All members of the faculty are paid on the basis individually established salaries, determined through a consideration of general criteria. The salary plan for faculty provides needed flexibility in salary matters and involves the judgment and recommendations of the University Faculty Senate, the department chairpersons, the academic deans, the Provost and Vice President for Academic Affairs, and the University President."

Control of expenditures is solely within the Department. An initial allocation of operational funding is given to each program for supplies and student wages. All equipment purchases are approved by the Department Chair after receiving recommendations from the Department Supplies and Equipment Committee.

e) Evaluation

Outcomes assessment is required by both the University accrediting agency, the North Central Association (NCA), and the ACCE. Outcomes assessment is a formalized procedure whereby the effectiveness of program goals, objectives, and outcomes can be verified. The Construction Management Program has established a set of procedures that collect feedback from various stake holders such as employers, students, and alumni. The feedback is analyzed by the CM faculty, and curriculum changes are made if considered to be necessary or desirable.

3. Describe the administrative procedure of the construction unit with regard to how the administration and faculty periodically review operations and curriculum offerings for improvement opportunities through sound experimentation and innovation.

How curriculum changes are proposed and implemented are discussed in heading 2a) above. Curriculum changes must be reviewed and approved at every administrative level at ISU. However, the CM program allows a high level of freedom to each instructor to determine how each course is taught as long as the goals and objectives for the Program are being addressed. Syllabi for every course are kept on file in the Department and are available to all faculty members. Moreover, faculty members are encouraged to share ideas about curriculum and pedagogy in scheduled meetings and informally. Faculty members are encouraged to offer innovative, elective courses during the summer sessions if funds are available and a minimum number of students enroll. For instance, on occasion, Dr. Huber taught a course about horizontal construction. During the summer there were many opportunities for the students to visit street and utility construction in the City.

An important function of the Construction Advisory Board is to offer advice about curriculum. The Advisory Board meets each semester with the construction faculty, Department Chair, and Dean of the College. Regular agenda items are current operations and curricular issues. The CM Program tries to accommodate suggestions from the Board if they are practical and do not compromise the existing curriculum. For example, in 2001, the Board suggested that a course be offered that invited construction professionals to present on current issues in the industry. One of the Board members, in conjunction with Dr. Huber, arranged for the guest lecturers and selected the topics. The guest speakers were from upper management within their organizations and were more than willing to participate. The course was offered one night a week during the spring semester, 2001. The speakers were so interesting that some students attended even though they were not enrolled in the course.

In the fall of 2006, the CM Program sponsored its first job fair in the Meyer's Technology Building. It was a great success. Notwithstanding it was the same date as the local homebuilder's show and Purdue's job fair, twenty-two construction companies attended. The career fair in the fall of 2007 was even more successful; twenty-six companies attended.

In the spring of 2006 during his sabbatical, Dr. Ellingson designed a Center for Sustainable Construction for a parcel of land owned by the University on the southeast corner of 4th and Cherry streets. (See Appendix.) This idea was conceived in a meeting with the construction faculty and the deans of the College of Technology. The purpose of the meeting was to discuss long-term strategic plans for the Construction Program. We have the vision; now we just need the funding.

Dr. Reposa, Dr. Kim, and Dr. Ellingson are serving on the President’s Council for the Built Environment. Dr. Ellingson is a co-chair of this committee. The purpose of this initiative is to place ISU in the forefront of sustainability among institutions of higher learning.

In the spring, 2007, Dr. Haddad met Nick Billotti, the CEO of Turner Construction, at a Conference and invited him to come and speak at ISU. Mr. Billotti consented and made an exciting presentation. Students, faculty, and guests from the construction industry attended. It was a great success. As a result, the CM Program may initiate a guest speaker series as a regular event.

The Center for Instruction, Research, and Technology (CIRT) offers faculty members at ISU grants for using technology in innovative ways in the classroom. The CIRT also offers regular workshops on curriculum and pedagogical development.

Dr. Kim is currently negotiating with a company in Korea to provide research directed towards the design and implementation of an integrated data base for construction companies.

Innovative ideas are often generated by regularly scheduled construction meetings and ad hoc meetings with administrative personnel. Creative ideas are also generated by individual faculty members on their own initiative. In general, experimentation and innovation are encouraged at ISU. See Section IV, Heading E, Faculty Professional Development, for more information.

C. Related Programs

1. Describe intra-campus and multi-campus relationships with allied disciplines.

The CM Program has established a "learning community" with the Department of Economics which integrates CNST 101, Introduction to Construction, with ECON 100, Basic Economics. These courses must be taken concurrently.

ISU has extensive general education requirements. These requirements include a variety of courses including business, management, economics, mathematics, English, communications, and the sciences.

The CM Program has had a long-standing relationship with the Health, Safety, and Environmental Health Sciences (HLTH) Department. Some construction students decide to acquire a safety minor by taking a few extra courses in the HLTH Department. In 2007, the CM Program decided to return the favor and created a construction minor. Some students in the HLTH Department want to work for construction companies and want additional construction knowledge.

All tenure-track construction faculty participate in the Ph.D. in Technology Management Consortium. The Consortium has a specialization in construction and encourages faculty to collaborate in curriculum requirements. Ph.D. faculty meet periodically to discuss curricular issues. Members of the Consortium are:

- Bowling Green State University
- University of Central Missouri
- East Carolina University
- Indiana State University
- North Carolina A&T University

2. Describe provisions that have been established for interfacing with related programs and for the interaction of the faculty with those in other disciplines.

As previously mentioned, the College of Technology has reduced its number of departments from five to three. One of the main reasons for this reorganization was to capitalize on the possibility of collaboration between programs. Three courses that construction students are allowed to take are TMGT 492, Industrial Supervision, TMGT 429, Workplace Law, and MET 215, Graphic Analysis. Discussions for further collaboration are ongoing.

D. Construction Unit Budget

1. Indicate the approximate amount and percentage of the sources of recurring operating revenue for the construction unit for the prior fiscal year.

Table 3: CM Operating Revenue for 2007-2008

Source	Amount ($)	%
Institutional Funds		
Total Operating Revenue		

2. *Indicate the approximate amount and percentage of the expenditures for the construction unit for the prior fiscal year.*

Table 4: CM Expenditures for 2007-2008

Type of Expenditure	Amount ($)	%
Faculty salaries and wages	257,500	97
Expenses (Travel, wages, & supplies)	8138	3
Total Expenditures	265,638	100

Note: Accurate total expenditures will not be available until after 7/1/08.
Salary amount is for 3 faculty, 1 special faculty, and 1 vacancy.
Each new faculty member in 2007 received $4500 each for start-up funds.

3. *Describe the nature of, the approximate amount, and the use of nonrecurring funds for the preceding year.*

4. *Indicate how the budget is sufficient to enable the program to realize its mission and goals.*

In the TMGT Department, faculty are allowed $1,000 per year for travel expenses. This is typically adequate to pay for one external conference. Additional travel money is often available from the Dean and residual funds from other line items at the end of the fiscal year.

Equipment, supplies, repairs, and student wages often have a surplus at the end of the year.

E. Comparable Program Budgets

Institutional support by the administration of the construction unit should accord status within the institution comparable to that of other academic units of similar size and function with regard to finances. Indicate the amount and percentage of operating revenue and expenditures for units on the campus that are comparable to the construction unit.

Table 5: Comparable Unit Operating Revenue for 2006-2007

Source	Amount ($)	%
Institutional Funds (total COT)	317,062	
Manufacturing and Construction Technology (MCT) Dept.	53,106	16.75
Aerospace Technology (AST) Dept.	32,006	10.09
Electronics and Computer Technology (ECT) Dept.	43,540	13.73

Industrial and Mechanical Technology (IMT) Dept.	43,773	13.81
Industrial Technology Education (ITE) Dept.	62,072	19.58
Total Revenue		100

Table 6: Comparable Unit Expenditures for 2007-2008

Type of Expenditure	Amount ($)	%
Manufacturing and Construction Technology (MCT) Dept.	60,444	21.8
Aerospace Technology (AST) Dept.	30,890	11.2
Electronics and Computer Technology (ECT) Dept.	72,902	26.4
Industrial and Mechanical Technology (IMT) Dept.	57,618	20.8
Industrial Technology Education (ITE) Dept.	54,800	19.8
Total Expenditures	276,654	100

III. CURRICULUM

A. PROGRAM DESCRIPTION

1. *Construction program title:*

   Construction Management

2. *Degree title:*

   Bachelor of Science

3. *Credit hours required for the degree:*

   Semester hours: 124

4. *List program options.*

   - One 3-hour elective.
   - CNST 218, Statics, or MET 302 Applied Statics
   - TMGT 492, Industrial Supervision, or MGT 301, Survey of Management
   - TMGT 429, Workplace law, or BUS 263, Legal Environment and Business
   - MATH 115, College Algebra and Trigonometry, or MET 215, Graphic Analysis.
   - PHYS 106/106L, Physics II & Lab, or CHEM 105/105L, Chemistry & Lab

5. *List other degree programs administered by the construction unit.*

   Construction Minor

   All tenure-track faculty participate in the Ph.D. Consortium in Technology Management.

B. INSTITUTIONAL REQUIREMENTS

1. *State the curricular requirements established at the state level.*

   The State of Indiana has set no curricular requirements other than the graduation requirement of 124 semester hours.

2. *State the curricular requirements established at the institution level.*

   Indiana State University requires that all students complete the following General Education Program:

   Basic Studies

   a) *English 101 and English 105 or English 107 or English 130* are required of all students during their first two semesters. Freshmen with SAT verbal scores below 510 or ACT

English usage scores below 20 are required to take English 101 during their first semester before taking English 105 during their second semester. Freshmen with SAT verbal scores of 510 or higher or ACT English usage scores of 20 or above are required to take English 107 during their first semester. International students whose native language is not English will be tested by the Department of Languages, Literatures, and Linguistics for placement in an appropriate course. Unless specifically exempted, international students whose native language is not English must take English as a Second Language 103A and English as a Second Language 103B before enrolling in English 105. English majors and minors take English 108. Students in English Honors or University Honors take English 108

English 305 or English 305T or English 405 or Business Education, Information, and Technology 336 or a substitute course approved by the Department of English is required of all students upon completion of the freshman composition requirement and 48 semester hours of course work. English teaching majors and minors take English 307 and English liberal arts majors take English 308 in lieu of 305. Students enrolling in English 405 must have completed 62 hours of course work.

A student who does not earn a passing grade in one of the above-mentioned writing courses must repeat that course the following semester.

b) *Communication 101* is required of all first-year students with the following exceptions:

If an agreement exists between the Department of Communication and a student's major department, that student may meet the communication requirement by successfully completing one of the following courses:

Communication 102A
Communication 202
Communication 215
Communication 302

A student may also meet the communication requirement by passing a for-credit equivalency examination administered by the University Testing Office.

c) *Quantitative Literacy* is required of all students, preferably within their first 62 hours of credit earned at ISU. Students may satisfy this requirement by obtaining a passing score on the Quantitative Literacy Exemption Test or by earning a passing grade in one of the following courses: Mathematics 102, college algebra or a higher level statistics course, or a college-level statistics course. The list of approved mathematics and statistics courses is pending.

d) *Foreign Languages*. Students must complete 101 and 102, in a single language of their choice, unless they have completed the equivalent of two years (four semesters) of a single language at the high school level with an average grade of C or better. International students whose first language is not English will be exempt from this requirement. Students entering ISU with an associate's degree or higher degree form an institution other than ISU may be exempted from this requirement by the recommendation of the program in which they enroll at ISU.

Students who are not exempt from the requirement will be advised for placement into the appropriate language class according to their record of high school language study.

Students who have already satisfied the language requirement are eligible to earn free credit by examination for language completed in high school if they take the Foreign

Language Placement Examination administered by the Department of Languages, Literatures, and Linguistics and complete a language class offered by that department.

e) *Information Technology Literacy* for Students entering summer 2003 or later. Information technology literacy is expected to be demonstrated by all students within the first 32 hours of course work at ISU by obtaining a passing score on the Information Technology Literacy Exemption Test, completing a major for which the requirement is met through course work required for the major program, or successfully completing one of the following approved information technology literacy courses:

BEIT 125	Information in the Electronic Age
CIMT 272	Introduction to Classroom Computer Use
CS 101	Information Technology Literacy
ELED 272	Introduction to Classroom Computer Use
HLTH 112	Computing Literacy in HLTH.
MCT 295	Introduction to Computer Applications
NURS 108	Information Technology Literacy for Healthcare

f) *Physical Education 101 and 101L* are required of all students. Majors in elementary education take Physical Education 348, while majors in kindergarten-primary education and early childhood education take Physical Education 463 to satisfy this requirement.

Liberal Studies

g) Scientific and Mathematical Studies: One Foundational Laboratory Science Course (SMS: F,E) and one Scientific and Mathematical Studies Elective course (SMS: E).

h) Social and Behavioral Studies: One Foundational course (SBS: F,E) and one Social and Behavioral Studies Elective course (SBS: E).

i) Literary, Artistic, and Philosophical Studies: One Literature and Life course (LAPS: LL) and one Literary, Artistic, and Philosophical Studies Elective course (LAPS: E).

j) Historical Studies: One Historical Studies course (HS).

k) Multicultural Studies: One U.S. Diversity course (MCS: USD) and one International Cultures course (MCS: IC).

l) General Education Capstone requirement for students entering summer 2003 or later. One approved General Education Capstone course (CAP) in Liberal Studies or in the major.

3. State the curricular requirements established at the college level.

None.

C. Plan of Study

1. Date the most recent curriculum revision.

Since the initial approval of the Construction major in 1976, five curriculum revisions have taken place. The first, in the 1981/82 academic year dropped one mechanical drafting course and added a graphical analysis course. At the same time a new introduction to construction course was added to the curriculum.

The second curriculum revision was approved during the 1983/84 academic year. This revision was implemented to offer statics, strength of materials, and structural design courses within the program. This change was in response to the addition, in 1980, of a highly qualified faculty in the Construction Program, Professor Dennis Sapp.

The third curriculum revision was completed during the 1985/86 academic year. This revision was designed to bring the construction curriculum in line with ACCE guidelines. To ensure that the revisions would comply with the ACCE guidelines Dr. D. Dorsey Moss, Professor of Construction at Purdue University, was invited to visit Indiana State University to evaluate the Construction Technology curriculum and to make recommendations concerning meeting ACCE curriculum requirements. Through the incorporation of Dr. Moss' analysis and subsequent recommendations, the curriculum revision submitted for approval and adoption was designed to meet that goal. This curriculum revision was approved and the revised major was offered for the first time during the fall semester, 1986.

The fourth curriculum revision was necessitated by a major overhaul of the University General Education program in 1989. This overhaul of the General Education curriculum required modification of the courses required in the program which would both fall within the categories of General Education as well as ACCE requirements.

The fifth curriculum revision was approved effective with the 2000/2001 academic year. The name of the program was changed to Construction Management, the number of directed semester hours was changed from 82 to 75, Construction Safety (MCT 310), Architectural Drawing and Planning II (MCT 316), and Soil Analysis and Testing (MCT 411) were added as a curriculum requirement. The addition of MCT 316 to the curriculum was in response to requests from the Construction Industry Advisory Council to offer instruction in computer assisted design software packages. MCT 416 was renamed Architectural Drawing and Planning III. Accounting 200 was substituted for ACCT 201 (Survey of Accounting versus Principles of Accounting, the introductory course for accounting majors). MATH 241, Principles of Statistics, replaced MATH 301, Fundamentals and Applications of Calculus. Coincidental with this revision, the university's General Education was revised to include incorporating a foreign language requirement of six semester hours for students that did not successfully complete at least two years of a foreign language in high school.

The sixth curriculum revision was approved in the spring of 2006. It changed the requirement for MATH 122, Analytic Geometry, to MATH 123, Analytic Geometry and Linear Algebra for Engineers. MATH 123 was created especially for technical students. Prerequisites were changed for MCT 211, 213, 214, and 413 to facilitate scheduling of courses and to represent more accurate knowledge base needs for the courses. In addition, course titles and descriptions of MCT 106, 206, and 306 were revised to more accurately describe course content.

The most recent curriculum revision was approved in spring of 2006. It changed the requirement for MATH 122, Analytic Geometry, to MATH 123, Analytic Geometry and Linear Algebra for Engineers. MATH 123 was created especially for technical students. Prerequisites were changed for MCT 211, 213, 214, and 413 to facilitate scheduling of courses and to represent more accurate knowledge base needs for the courses. In addition, course titles and descriptions of MCT 106, 206, and 306 were revised to more accurately describe course content.

In the spring of 2007, the Construction Program submitted a proposal for a minor in Construction Management. This was at the request of the Health, Safety, and Environmental Health Sciences (HLTH) Department. The HLTH Dept. has a number of students interested in working for construction companies as a safety coordinator. These students have expressed interest in a construction minor to augment their credentials. The construction minor was approved in the fall of 2007.

The latest curriculum revisions were proposed in the fall of 2007 and approved in the spring of 2008 as described below:

Old Catalogue 2007-2008	New Catalogue 2008-2009
MCT 133 Introduction to Construction Technology and Management—2 hours. An orientation course for construction technology and management students.	**CNST 101 Introduction to Construction Management**—2 hours. An orientation course for construction management students.
MCT 211 Construction Methods and Equipment—3 hours. Sequential operations in building and road construction, including heavy equipment options and applications, concrete, steel, asphalt, earthwork methods, and cost control.	**CNST 111 Construction Materials, Methods, and Equipment**—3 hours. A review of the properties, sizes, and uses of materials; an analysis of the sequence of construction; and an introduction to construction equipment.
MCT 413 Construction Specifications and Contract Documents—3 hours. General conditions of the construction contract, construction specifications, agreement forms, addenda, change orders, and subcontracts. Prerequisite: 306 or consent of instructor.	**CNST 201 Construction Contract Documents and Project Delivery**—3 hours. Working drawings, project manual, and project delivery. Examines relationships and responsibilities of all parties to a construction contract. Prerequisite: 111.
MCT 214 Plan Interpretation and Quantity Take-Off—3 hours. Introduction to the basics blue print interpretation and quantity take-off for commercial and residential construction projects.	**CNST 214 Plan Interpretation and Quantity Take-Off**—3 hours. Interpretation of working drawings and quantity take-off for commercial and residential construction projects. Prerequisite: 111.
MCT 218 Statics—3 hours. Analysis of forces to maintain equilibrium of components and materials used in the construction process. Prerequisites: Must have completed Industrial and Mechanical Technology 215 or Mathematics 115 and 122 with grade of C or better, or have equivalent transfer credits.	**CNST 218 Statics**—3 hours. Analysis of forces to maintain equilibrium of components and materials used in the construction process. Prerequisites: Mathematics 115 or Mechanical Engineering Technology 215.
MCT 304 Construction Scheduling—3 hours. A study of the planning and scheduling processes of the construction industry. Scheduling systems such as CPM, GANTT, and PDM will be stressed.	**CNST 304 Construction Scheduling**—3 hours. A study of the planning and scheduling practices of the construction industry. Prerequisite: CNST 214.
MCT 306 Commercial Design and Construction—3 hours. Planning a commercial steel and/or concrete building from a program with a specific site, including code requirements, detailed drawings, and project cost estimate. Prerequisite: 206.	**CNST 306 Commercial Design and Construction**—3 hours. Planning a commercial steel and/or concrete building from a program with a specific site, including code requirements, detailed drawings, and project cost estimate. Prerequisite: 106.
MCT 310 Construction Safety—3 hours. An analysis of OSHA regulations as they pertain to the construction industry. Course includes job site visits and reporting. Upon successful completion of this course, students will receive a 30-hour OSHA certification. Prerequisite: 133, 211, or consent of instructor.	**CNST 310 Construction Safety**—3 hours. An analysis of OSHA regulations as they pertain to the construction industry. Course includes job site visits and reporting. Upon completion of this course, students will receive a 10-hour OSHA certification.

MCT 314 Estimating and Cost Analysis—3 hours. Construction contractual relationships, estimates, bids, and cost control. Quantity survey methods, labor and material costs for light and commercial construction projects. Prerequisites: 214.	**CNST 314 Estimating and Bid Preparation**—3 hours. Estimating construction costs and preparation of bid documents. Prerequisite: 214.
MCT 318 Strength of Building Materials—3 hours. Analysis of internally induced stresses as the result of externally applied forces in various types of structural members used in the construction process. Prerequisites: 218 or Industrial and Mechanical Technology 302.	**CNST 318 Strength of Building Materials**—3 hours. Analysis of internally induced stresses as the result of externally applied forces in various types of structural members used in the construction process. Prerequisites: 218 or Mechanical Engineering Technology 302.
MCT 414 Construction Inspection—3 hours. Inspection of contracted building construction from the standpoint of confirmation to the contract documents and accepted industry standards. Prerequisite: 413.	**CNST 414 Construction Quality Control and Assurance**—3 hours. Quality control and assurance of contracted construction from the standpoint of confirmation to the contract documents and industry standards. Prerequisite: 201.
MCT 418 Design of Temporary Structures—3 hours. Design of temporary structures used by the constructor in the construction process, to include concrete mix design. Prerequisite: 318.	**CNST 418 Design of Temporary Structures**—3 hours. An introduction to the materials, methods, and techniques associated with temporary structures used in various construction operations such as concrete formwork, scaffolding, falsework, and shoring. Prerequisite: 318.
MCT 420 Plane Surveying—3 hours. Basic surveying, use of instruments, recording and computing data, site layout, and earthwork.	**CNST 420 Plane Surveying**—3 hours. Basic surveying, use of instruments, recording and computing data, site layout, and earthwork. Prerequisite: Mathematics 115 or Mechanical Engineering Technology 215.
MCT 450 Construction Management—3 hours. Management of construction using the project management system. Students will be expected to take the national AIC certification examination. Prerequisites: 306, 413, ECT 369, or consent of instructor.	**CNST 450 Construction Management**—3 hours. A comprehensive overview of construction project management. Prerequisites: 201, 304, and 314.

2. *List the course requirements by semester.*

The following schedule is only a guideline. Its purpose is to show students and advisors how to graduate within four years taking a reasonable course load each semester. However, due to extenuating circumstance, some students deviate somewhat from this proposal.

First Semester

(2)	CNST	101	Introduction to Construction Management
(3)	CNST	106	Architectural Graphics
(3)	MATH	115	College Algebra and Trigonometry
(3)	ECON	100	Basic Economics
(3)	ENG	107	Freshman Writing
14	credit hours		

Second Semester

(3)	MGT	140	Introduction to Business
(3)	TMGT	195	Introduction to Computer Applications
(3)	COMM	101	Introduction to Speech
(3)	CNST	111	Construction Materials, Methods and Equipment
(2)	PE	101	Fitness for Life
14	credit hours		

Third Semester

(3)	ACCT	200	Survey of Accounting
(3)	Liberal Studies		
(4)	PHYS	105/L	Physics I and Lab
(3)	BUS	263	Legal Environment & Business
(3)	CNST	218	Statics
16	credit hours		

Fourth Semester

(3)	CNST	201	Construction Contract Documents
(3)	MATH	241	Statistics
(4)	PHYS	106/L	Physics II & Lab or
	CHEM	105/L	General Chemistry I & Lab
(3)	CNST	214	Plan Interpretation and Quantity Takeoff
(3)	CNST	213	Environmental & Mechanical Systems for Buildings
16	credit hours		

Fifth Semester

(3)	CNST	304	Construction Scheduling
(3)	CNST	306	Commercial Design and Construction
(3)	CNST	314	Estimating and Bid Preparation
(3)	CNST	318	Strength of Building Materials
(3)	ECON	351	Survey of Labor Economics and labor Institutions
15	credit hours		

Sixth Semester

(3)	CNST	310	Construction Safety
(3)	ECT	369	Electrical Construction
(3)	CNST	320	Soil Analysis and Testing
(3)	Liberal Studies		
(3)	ENG	305T	Technical Writing
15	credit hours		

Summer (Junior Year)

(3)	CNST	351	Internship / Cooperative Practice
3	credit hours		

Seventh Semester

(1)	TMGT	430	Senior Seminar
(3)	CNST	420	Plane Surveying

(3)	TMGT	492	Industrial Supervision or
	MGT	301	Survey of Management
(3)	CNST	418	Design of Temporary Structures
(3)	CNST	420	Plane Surveying
(3)	Liberal Studies		
16	credit hours		

Eight Semester

(3)	CNST	414	Construction Quality Control
(3)	CNST	450	Construction Management
(3)	Liberal Studies		
(3)	Elective		
(3)	Gen. Ed. Capstone		
15	credit hours		

D. DEGREE REQUIREMENTS

Table 7: General Education

Course No.	Course Title or Elective Requirements	Credit Hours
CNST 101	Introduction to Construction	0.33
CNST 310	Construction Safety	0.33
CNST 201	Construction Contract Documents	0.33
TMGT 430	Senior Seminar	1.00
COMM 101	Introduction to Speech Communication	3.00
MATH 115	College Algebra and Trigonometry	3.00
ENG 107	Rhetoric and Writing	3.00
ENG 305T	Technical Writing	3.00
Select	HS (Historical Studies)	3.00
Select	LAPS:E	3.00
Select	LAPS:LL	3.00
Select	MCS:IC	3.00
Select	MCS:USD	3.00
Select	General Education Capstone Course	3.00
PE 101	Fitness for Life	2.00
Select	Elective	3.00
Total	(15 Required)	37.00

Table 8: Mathematics and Science

Course No.	Course Title or Elective Requirements	Credit Hours
CNST 213	Environmental & Mech. Systems	1.00
TMGT 195	Introduction To Computer Applications	3.00
MATH 241	Statistics	3.00
PHYS 105	General Physics I	4.00
Select	PHYS 106 or CHEM 105	4.00
Total	(15 Required)	15.00

Table 9: Business and Management

Course No.	Course Title or Elective Requirements	Credit Hours
TMGT 351	Internship / Cooperative Practice	1.00
CNST 450	Construction Management	2.00
TMGT 492	Industrial Supervision	3.00
ACCT 200	Survey of Accounting	3.00
ECON 100	Basic Economics	3.00
ECON 351	Survey of labor Economics	3.00
MGT 140	Introduction to Business	3.00
Total	(18 Required)	18.00

Table 10: Construction Science

Course No.	Course Title or Elective Requirements	Credit Hours
CNST 106	Architectural Graphics	3.00
CNST 111	Construction Methods & Equipment	2.00
CNST 213	Environmental & Mechanical Systems	2.00
CNST 218	Statics	3.00
CNST 306	Commercial Design and Construction	3.00
CNST 318	Strength of Building Materials	3.00
CNST 320	Soil Analysis & Testing	3.00
TMGT 351	Internship / Cooperative Practice	1.00
CNST 414	Construction Quality Control	1.00

CNST 418	Design of Temporary Structures	3.00
CNST 420	Plane Surveying	3.00
ECT 369	Electrical Construction	3.00
Total	(20 Required)	30.00

Table 11: Construction

Course No.	Course Title or Elective Requirements	Credit Hours
CNST 101	Introduction to Construction Management	1.67
CNST 111	Construction Methods & Equipment	1.00
CNST 214	Plan Interpretation & Quantity Takeoff	3.00
Select	BUS 263 or TMGT 429 (Business Law)	0.33
CNST 304	Construction Scheduling	3.00
CNST 310	Construction Safety	2.67
CNST 314	Estimating and Bid Preparation	3.00
TMGT 351	Internship / Cooperative Practice	1.00
CNST 201	Construction Contract Documents	2.67
CNST 414	Construction Quality Control	2.00
CNST 450	Construction Management	1.00
Total	(20 Required)	21.33

Table 12: Other Requirements

Course No.	Course Title or Elective Requirements	Credit Hours
	None	

E. Required Curriculum Categories, Core Subject Matter, and Curriculum Topical Content—Four Year Baccalaureate Programs

Please refer to insert following this page.

F. Degree Requirements—Two year Associate Degree Programs

Not Applicable

G. Required Curriculum Categories, Core Subject Matter, and Curriculum Topical Content—Two year Associate Degree Programs

Not Applicable

H. Course Sequencing

Please see the Appendix (Misc.) for the course sequencing table.

I. Course Descriptions

1. Provide a catalogue description for all required courses, including those courses taught within the construction unit. (New catalogue)

CNST 101 Introduction to Construction Management—2 hours. An orientation course for construction management students.

CNST 106 Architectural Graphics—3 hours. An introduction to architectural graphics and construction documents. Students will learn how to read and interpret working drawings and create a simple drawing using CAD.

CNST 111 Construction Materials, Methods and Equipment—3 hours. A review of the properties, sizes, and uses of materials; an analysis of the sequence of construction; and an introduction to construction equipment.

CNST 201 Construction Contract Documents and Project Delivery—3 hours. Working drawings, project manual, and project delivery. Examines relationships and responsibilities of all parties to a construction contract. Prerequisite: 111.

CNST 213 Environmental and Mechanical Systems for Buildings—3 hours. Building climate control, heat loss and heat gain calculations, sanitary, and water systems.

CNST 214 Plan Interpretation and Quantity Takeoff—3 hours. Interpretation of working drawings and quantity takeoff for commercial and residential construction projects. Prerequisite: 111.

CNST 218 Statics—3 hours. Analysis of forces to maintain equilibrium of components and materials used in the construction process. Prerequisites: Mathematics 115 or Mechanical Engineering Technology 215..

TMGT 195 Introduction to Computer Applications—3 hours. This course is designed to provide all first year and transfer students with the basic working knowledge of computers, computer applications, and information management skills necessary to succeed in today's information technology based society. *General Education Credits [GE2000: Information Technology Literacy]*

CNST 304 Construction Scheduling—3 hours. A study of the planning and scheduling practices of the construction industry. Prerequisite: 214.

CNST 306 Commercial Design and Construction—3 hours. Planning a commercial steel and/or concrete building from a program with a specific site, including code requirements, detailed drawings, and project cost estimate. Prerequisite 106.

CNST 310 Construction Safety—3 hours. An analysis of OSHA regulations as they pertain to the construction industry. Course includes job site visits and reporting. Upon completion of this course, students will receive a 10-hour OSHA certification.

CNST 314 Estimating and Bid Preparation—3 hours. Estimating construction costs and preparation of bid documents. Prerequisites: 214.

CNST 318 Strength of Building Materials—3 hours. Analysis of internally induced stresses as the result of externally applied forces in various types of structural members used in the construction process. Prerequisites: 218 or Mechanical Engineering Technology 302.

CNST 320 Soil Analysis and Testing—3 hours. Identification and classification of various soils found on the construction jobsite. Using proper testing techniques, appropriate courses of action can be determined to prepare the onsite soil for intended construction activities. Soil compaction, site drainage, and test report interpretation will be emphasized. Prerequisite: 318.

CNST 351 Internship/Cooperative Practice—3 hours. Coordinated work experience in industry and a comprehensive written report of the experience. Students are required to involve the Indiana State University Career Center in this experience. Course may be taken twice for a maximum of 6 credits.

CNST 414 Construction Quality Control and Assurance—3 hours. Quality control and assurance of contracted construction from the standpoint of confirmation to the contract documents and industry standards. Prerequisite: 201.

CNST 418 Design of Temporary Structures—3 hours. An introduction to the materials, methods, and techniques associated with temporary structures used in various construction operations such as concrete formwork, scaffolding, falsework, and shoring. Prerequisite: 318.

CNST 420 Plane Surveying—3 hours. Basic surveying, use of instruments, recording and computing data, site layout, and earthwork. Prerequisite: Mathematics 115 or Mechanical Engineering Technology 215.

TMGT 430 Senior Seminar—1 hour. Special problems of technologists. Career planning and personnel roles in industry.

CNST 450 Construction Management—3 hours. A comprehensive overview of construction project management. Prerequisites: 201, 304, and 314.

TMGT 492 Industrial Supervision—3 hours. The role of supervision functions in industry with emphasis upon principles and practices of human behavior and human relations within the industrial environment. Prerequisite: student must have a minimum junior standing or have prior approval of instructor.

BUS 263 Legal Environment and Business—3 hours. An introduction to topics of interest to business persons, including product liability and consumer protection, workers rights and protection, organization and regulation of business ethics, and the judicial system. Prerequisite: sophomore standing.

CHEM 105 General Chemistry I—3 hours. Topics include atomic structure, physical properties of gases, nomenclature, molecular bonding and geometry, mass relationships in chemical equations, and thermochemistry. Because the course assumes adequate knowledge of algebra, the following is strongly recommended: prior completion or current enrollment in Mathematics 111 or higher, or a mathematics SAT score of 510 or higher, or an ACT score of at least 21. Corequisite: concurrent enrollment in 105L, or consent of instructor or chairperson. *[GE89: credits assigned if taken in sequence with 106 and 106L, A6].*

CHEM 105L General Chemistry I Laboratory—1 hour. A weekly three-hour series of experiments designed to illustrate lecture topics from 105 and to develop laboratory techniques. Corequisite: concurrent enrollment in 105 or consent of instructor or chairperson.

COMM 101 Introduction to Speech Communication—3 hours. Basic principles and practices of oral communication. Required of all freshmen.

ECT 369 Electrical Construction—3 hours. Theory and practice in electrical construction, both domestic and commercial. Topics include National Electric Codes and Standards, blueprint specifications, wiring practices, switching, lighting, remote control, motors, transformers, power factors, overload and grounding in single-phase and three-phase installations in single family dwellings, multiple family dwellings, industrial locations, hazardous locations, and electrical estimating.

ENG 107 Rhetoric and Writing—3 hours. Writing documented papers synthesizing information from several different sources, with emphasis on the application of rhetorical principles to critical reading and effective writing. Freshman with SAT verbal scores of 510 or above or ACT English usage scores of 20 or above must take this course or 130 during their first semester.

ENG 305T Technical Writing—3 hours. Writing in conventions, formats, and styles applicable to internal, world-of-work settings. Recommended for majors in science, technology, and related areas. Satisfies 305 requirements. Prerequisites: 105 or 107 or 108 or 130, and the successful completion of 48 semester hours of course work.

IMT 429 Workplace law and the Industrial Supervisor—3 hours. Analysis of laws and regulations that have the greatest influence on management of front-line industrial employees. Research and synthesis of legislation, landmark and recent litigation, case studies, trends, and industrial projects are used to prepare industrial front-line supervisors to proactively meet the letter and spirit of the law while meeting management goals.

MGT 140 Introduction to Business—3 hours. A survey course to acquaint the students with functions performed by business and the role business activities play in our society. (Not open to upper-class College of Business majors.) General Education Credits *[GE 89: B3; GE 2000: Social and Behavioral Studies-Elective]*.

MGT 301 Survey of Management—3 hours. A survey of the management process, the basic principles and concepts of internal organization and management, designed for nonbusiness majors. Prerequisite: junior standing or consent of instructor. Credit will not be given for both 200 and 301. (Not open to College of Business majors.)

MATH 115 College Algebra and Trigonometry—3 hours. Polynomial equations, systems of linear equations, translations, reflections, symmetry, functions, graphs, lines and conic sections, mathematical induction, and trigonometric functions. Does not count toward the mathematics major or minor. Prerequisite: appropriate placement examination (COMPASS/ASSET) score or MATH 111. Students without an appropriate trigonometry background are advised to take MATH 112.

MATH 241 Principles of Statistics—3 hours. A course for non-mathematics majors and minors. Graphical and numerical representation of data, probability, sampling, statistical inference, correlation, and regression. Prerequisite: MATH 111 or equivalent.

PE 101 Fitness for Life—2 hours. This course presents information and activities which emphasize fitness and exercise and their relationship to health. Lectures and a variety of accompanying laboratory activities help students make informed decisions about fitness,

exercise, and health throughout their lifetime. Regular participation in physical activity is a main component of the course. General Education Credits *[GE 2000: Basic Studies requirement]*.

PE 101L Fitness for Life Laboratory—0 hours. Laboratory activities supporting concepts from 101. Concurrent enrollment in 101 is required.

PHYS 105 General Physics I—3 hours. An algebra-based introduction to physics with applications to other scientific disciplines. Topics include vectors, Newton's laws of motion in one and two dimensions, work and energy, momentum and collisions, and wave motion. This course requires proficiency in intermediate algebra; prior completions of Mathematics 111 or higher is strongly recommended. Corequisite: concurrent enrollment in 105L. General Education Credits *[GE 89: A3; GE 2000: Scientific and mathematical Studies-Elective]*.

PHYS 105L General Physics I Laboratory—1 hour. The laboratory component of 105. Students will enroll in a 2 hour laboratory class. Prerequisite: must be taken concurrently with 105. General Education Credits *[GE89: A1; GE 2000: Scientific and Mathematical Studies-Elective]*.

PHYS 106 General Physics II—3 hours. The course is the sequential continuation of 105. The topics include electricity and magnetism, optics, relativity, and atomic and nuclear physics. Prerequisites: 105 and 105L. Corequisite: concurrent enrollment in 106. General Education Credits *[GE89: A3; GE 2000: Scientific and Mathematical Studies-Elective]*.

PHYS 106L General Physics II Laboratory—1 hour. The laboratory component of 106. Students will enroll in a 2 hour laboratory class. Corequisite: must be taken concurrently with 106. General Education Credits *[GE89: A1; GE 2000: Scientific and Mathematical Studies-Elective]*.

2. *Note and document any discrepancies between existing catalogue descriptions and current course listings.*

   The courses listed above will be in the new, 2008-2009 undergraduate catalogue. The new catalogue was not available at time of shipping.

3. *Please see the appropriate Appendix for course syllabi.*

J. COURSE OFFERINGS

1. *List the required courses taught by the construction unit. Indicate course number, title, number of sections per semester, and average enrollment per section for the most recent academic year.*

   Table 13: Required Course Offerings for 2006-2007

Required Courses		No. of Sections			Average Enrollment
No.	Title	Fall	Sprg.	Sum.	
MCT 106	Architectural Graphics	1	1		23
MCT 133	Intro. to Construction Mgt.	2	1		24
MCT 206	Residential Design & Const.	1	1		25
MCT 211	Const. Methods & Equipment	1	1		24
MCT 213	Environ. & Mech. Systems	1	1		24

MCT 214	Plan Interpret. & Quant. Takeoff	1			24
MCT 218	Statics	1			16
MCT 304	Construction Scheduling	1	1		23
MCT 306	Commercial Design & Const.	1	1		17
MCT 310	Construction Safety		1		22
MCT 314	Estimating & Cost Analysis		1		23
MCT 318	Strength of Bldg. Materials	1	1		12
MCT 320	Soil Analysis & Testing	1	1		16
MCT 351	Internship/Coop. Practice	1	1	2	26
MCT 413	Const. Specifications & Docs.	1			27
MCT 414	Construction Inspection		1		25
MCT 418	Design of Temporary Structures	1			14
MCT 420	Plane Surveying	1			14
MCT 450	Construction Management		1		25

2. *List the elective courses offered by the construction unit during the past two academic years.*

   None except for Horizontal Construction offered in summer 2005. Special topics courses are occasionally offered on an as-needed basis. All construction courses are required in the major.

3. *Comments*

K. SUPPORTING DISCIPLINES

1. *List the required courses in the construction curriculum taught by other academic units. Indicate other disciplines that utilize the same course.*

   Table 14: Supporting Disciplines

Course No.	Course Title	Other Discipline Using Course
ACCT 200	Survey of Accounting	College of Business
BUS 263	Legal Environ. & Business	College of Business
COMM 101	Introduction to Speech	All campus
ECON 100	Basic Economics	All campus
ECON 351	Survey of Labor Economics	College of Business
ECT 369	Electrical Construction	College of Technology
ENG 107	Freshman Writing	All campus
ENG 305T	Technical Writing	All campus
GE Cap.	Gen. Ed. Capstone Course	All campus
HIST	History Elective	All campus
TMGT 429	Workplace law	College of Technology

Language	Foreign Language Elective	All campus
LAPS:LL	Literature Elective	All campus
MATH 115	Algebra & Trigonometry	All campus
MATH 241	Statistics	All campus
MCS:IC	Multicultural Studies: International	All campus
MCS:USD	Multicultural Studies: U.S.	All campus
TMGT 195	Intro. to Computer Applications	All campus
TMGT 492	Industrial Supervision	College of Technology
MGT 140	Introduction to Business	All campus
MGT 301	Survey of Management	College of Business
PE 101	Fitness for Life	All campus
PHYS 105	General Physics I	All campus
PHYS 106	General Physics II	All campus

2. *Discuss the adequacy of the courses.*

   In general, these courses have been satisfactory.

IV. FACULTY

A. CURRENT STAFF

1. List the current faculty of the construction unit, including part-time and graduate instructors.

Table 15: Current Faculty List

Name	FTE	Highest Degree	Years on Staff	Tenured	Tenure Track	Non-Tenure Track	9 Months	12 Months
Richard Baker	Yes	Ph.D.	0	No	Yes		Yes	
Lee A. Ellingson	Yes	Ph.D.	11	Yes			Yes	
Chul S. Kim	Yes	Ph.D.	1	No	Yes		Yes	
John Reposa	Yes	Ph.D.	1	No	Yes		Yes	
Jim Smallwood	Yes	Ph.D.	8	Yes				Yes
Don McNabb	Yes	M.S.	8	No		Yes	Yes	
Jim Smallwood is the Chair of the Technology Management Dept. Don McNabb is on a three-year contract. Faculty are listed alphabetically within rank.								

2. List the current support staff of the construction unit and their assignments.

The Construction Management Program has no support staff of its own. The secretary of the Technology Management Department provides secretarial services on an as-needed basis.

B. STAFF ASSIGNMENT DEFINITIONS

Not Applicable.

C. CURRENT FACULTY ASSIGNMENTS

1. Provide data on faculty assignments for the most recent fall semester. List all faculty, full-time and part-timer, by name.

Table 16: Faculty Assignments for fall 2007

Name	Courses	Enrollment	SCH	Other Assignments	
				% Time	Activity
Lee A. Ellingson	MCT 213 MCT 306 MCT 603B	28 19 3	84 54 12		Outcomes Assessment. Reaccreditation. Meetings.
Chul S. Kim	MCT 106 MCT 211 MCT 218	23 24 26	69 72 78		
John Reposa	MCT 304 MCT 418 MCT 492	21 21 25	63 63 75		
Jim Smallwood	MCT 351 MCT 603C	4 5	12 15	50%	Department Chair
Don McNabb	MCT 106 MCT 133 MCT 206 MCT 214	26 37 25 33	78 74 75 99		

D. COMPENSATION

1. Provide data indicating the construction faculty salaries for the current year.

Table 17: Current Salary Data

Rank	No.	Average 9 Month Salary	No. of 12 Month Appointments	No. of Resignations in Past 5 years
Professor	0		0	1
Associate Professor	3	67,375	0	1
Assistant Professor	1	56,000	0	2
Instructor	1	50,000	0	0

2. Briefly describe the benefits program for the faculty.

a) Life insurance

The University's life insurance policy is underwritten by the john Hancock Life Insurance Company. The amount of coverage is determined by base salary.

b) Tax-deferred annuities

Voluntary.

c) Long-term disability coverage

ISU's long-term disability coverage is underwritten by TIAA. Employees with three years of continuous, full-time service are eligible. Premiums are paid in full by the University.

d) Counseling by CIGNA (www.cignabehavioral.com)

e) Fee waivers for classes

f) Dental coverage provided by Delta Dental

Delta Dental pays 100% of standard dental services for network dentists; Delta pays 80% for non-network dentists.

g) The retirement plan is TIAA-CREF.

h) Sick leave

Up to 12 days per year.

i) Health insurance

Health insurance is provided by Sagamore Health Network-Plus, which is administered by the Principal Life Insurance Company (www.principal.com). Drug benefits are provided by Anthem Blue Cross and Blue Shield (www.anthem.com). Flexible spending accounts are available. A table of benefits effective January 1, 2006, follows:

Table 18: Health Insurance Benefits, 2006:

Plan Features	Benefit
Co-pay In-Network	ISU: 80% Employee: 20%
Co-pay Out-of-Network	ISU: 50% Employee: 50%
Calendar Year Deductible	$250 individual / $750 family aggregate
Stop-Loss In-Network	$2,000 per individual Per calendar year $4,000 family aggregate
Stop-Loss Out-of-Network	$5,000 per individual Per calendar year $10,000 family aggregate
Hospital Pre-admission Certification	$500 penalty for non-compliance 100% penalty for extended days
Lifetime Maximum	$2,000,000 per individual
Eligible Dependent Children	End of calendar year of child's 19th birthday; or if full-time student, end of calendar year of child's 23rd birthday.

j) Prescription benefits

Table 19: Anthem Prescription Drug Benefit:

Plan Features	In-Network		Out-of-Network
Prescription Drug Card	Employee	ISU	No Benefits Paid
Generic	10%	90%	
Brand	20%	80%	
All Others	50%	50%	

3. Comments.

E. Evaluation and Promotion Policies

1. Faculty Evaluation

The award of tenure requires documented evidence of effective teaching or librarianship; a record of research, scholarship, or creative activity which has earned professional recognition; and a record of effective service to the University and to either the community or the profession. General expectations for faculty achievements in teaching and the relative importance of teaching or librarianship; research, scholarship, or creative activities; and service shall be specified at the time of initial appointment.

Specific performance goals shall be established during the annual reviews of probationary faculty. The goals established during the annual review process form the foundation for evaluations for tenure in terms of criteria and performance standards established by the faculty member's academic unit. In annual probationary reviews, the department level recommendations and the faculty member's materials are forwarded to the dean, who reviews them, makes an independent recommendation, and forwards it to the Provost and Vice President for Academic Affairs.

No later than the third year of probationary periods of five (5) or more years, the candidate is reviewed by the College Promotion and Tenure committee. Before evaluations are placed in faculty members' permanent files, they shall be given ample opportunity to append comments or rebuttal to the evaluation forms.

During the first year of the probationary period at Indiana State University, faculty members shall be notified of their reappointment or non-reappointment by written statement from the University President or the Provost and Vice President for Academic Affairs, no later than March 1. During the second year of the probationary period, notice of reappointment or non-reappointment shall be given no later than December 15. Starting with the third year of the probationary period, notice of reappointment or non-reappointment shall be given at least twelve (12) months before the expiration of the appointment. Because tenure and promotion shall be linked for individuals at the assistant professor/librarian level, such candidates are awarded tenure only upon meeting the evaluative criteria and performance standards for promotion to the rank of associate professor/librarian. The award of tenure may also be contingent upon the mission and need of the department at the time the tenure decision is made, as stated in *AAUP Policy Documents and Reports*.

2. Tenure and Promotion

a) Indicate the number of current faculty members that have been promoted and/or achieved tenure during the past five years.

Table 20: Promotion and Tenure

Current Rank	No. Promoted	No. Tenured
Professor	1	1
Associate Professor	1	1
Assistant Professor		
Instructor		

b) Briefly describe the tenure and promotion policies of the institution and the construction unit.

(1) Policy Regarding Awarding of Tenure

Academic tenure at Indiana State University is earned through faculty achievements at ISU; it is not transferable from another institution. Regular faculty members become eligible for continuous appointment (award of tenure) after satisfactorily completing a probationary period with annual reviews and six (6) years of full-time service in accredited institutions, at least four (4) of which must have been served under a tenure-track appointment at Indiana State University. During the probationary period, the appointee shall be given term appointments of not more than one (1) academic year.

Promotion and tenure shall be linked for individuals at the assistant professor level. Individuals beginning their probationary periods at the rank of assistant professor become eligible to apply for an award of tenure during the sixth year of continuing faculty achievements under a regular faculty appointment in accredited institutions, at least four (4) years of which must have been served under a regular faculty. Such candidates are awarded tenure only upon meeting the evaluative criteria and performance standards for promotion to the rank of associate professor. A negative recommendation from any review committee or administrative reviewer stops the review process.

Individuals beginning their probationary period at the rank of associate professor may be given credit for up to three (3) years of faculty achievements at other accredited institutions. If such credit is granted, these appointees may apply during the year in which the years credited and the years of service at Indiana State University total six (6).

Individuals beginning their probationary period at the rank of professor may be given credit for up to five (5) years of faculty achievements at other accredited institutions. These appointees become eligible to apply for tenure during the year in which the years credited and the years at Indiana State University total six (6).

(2) Policy for Promotion and Tenure Reviews

Annual probationary reviews result in a recommendation for reappointment, conditional reappointment, or nonreappointment. Faculty members who do not demonstrate continuing achievement in the interrelated activities of teaching or

librarianship; research, scholarship, and creativity; and service shall be conditionally reappointed or terminated. During the annual probationary review process, faculty members shall be notified in writing of their progress toward promotion and tenure. Evidence of unsatisfactory performance, insufficiency of evidence, and any other matter which might serve as a basis for conditional reappointment or subsequent non-renewal of the appointment shall be clearly specified in the notification. Means of remediation for conditionally reappointed faculty shall also be specified in writing.

Each department, and the college shall maintain specific evaluative criteria and performance standards for promotion and tenure, and candidates shall be regularly apprised of their progress in meeting them. The candidate's departmental colleagues shall have primary authority and responsibility for assessing academic discipline-specific faculty achievements. The College of Technology elects a Promotion and Tenure Committee consisting of tenured faculty members to evaluate candidates.

It is the candidate's responsibility to present to reviewing bodies evidence of achievements in the related activities of teaching; research, scholarship or creativity; and service.

(3) Procedures for Promotion and Tenure Reviews

(a) Departmental Review

Candidates for promotion and tenure submit to their departments materials documenting their achievements in teaching; research, scholarship, and creative activity; and service. These materials are reviewed independently by the department committee and chairperson. Each makes a separate recommendation, applying the recognized department evaluative criteria and performance standards, and taking into account the precise terms and conditions of the appointment letter and the comments generated during previous annual reviews. Candidates are notified of these recommendations and their rationales. If both department level recommendations are positive, the candidate's materials and the recommendations are forwarded to the appropriate school or college for consideration.

On April 24, 2003, the College of Technology approved a Promotion and Tenure Standards document that applies to all tenure-track faculty in the College. This document records policy procedures and the expected performance of faculty in the several areas related to promotion and tenure.

The promotion and tenure standards of this document are considered minimum expectations. Promotion and tenure decisions are qualitative in nature. The standards are not considered to be a checklist. Performance criteria are based on the three core elements of teaching, scholarship, and service. For more detail, please refer to this document which is provided in the appendix.

(b) College of Technology Review

Candidates' materials are evaluated independently by their college committees and deans, whose separate recommendations are based on the unit's evaluative criteria and performance standards. Candidates are notified of the committee's and dean's recommendations and rationales. If both recommendations are positive, they are forwarded with the candidate's materials to the Provost and Vice President for Academic Affairs. If one, or both, of the recommendations is negative, candidates may elect to a) terminate the review process, or b) prepare a written response which is forwarded with their materials to the next level of review.

(c) Provost and Vice President for Academic Affairs Review

The Provost and Vice President for Academic Affairs reviews recommendations from the department level reviews and from the college level reviews as well as the candidate's responses and documentation and then makes recommendations for promotion and tenure. In cases where recommendations from the department, college, and deans level are inconsistent, before making his/her recommendation, the Provost shall consult jointly with the chairperson (or appropriate representative) of the department personnel committee, the chairperson of the department, the chairperson of the college committee, and the dean.

The Provost and Vice President for Academic Affairs notifies the candidate of his/her recommendation. The candidate's dean, college committee, department chairperson, and department committee are also informed of this recommendation. Positive recommendations are forwarded to the University President. If the recommendation from the Provost and Vice President for Academic Affairs is negative, candidates may elect to a) terminate the review process, or b) formally appeal negative recommendations to the University Promotions and Tenure Oversight Committee

F. PROFESSIONAL DEVELOPMENT

Discuss institutional and departmental policies related to:

1. Consulting

Faculty members are encouraged to participate in consulting activities appropriate to their academic or professional areas of competence.

Consulting activities should not involve absence from the University for more than 20% of the total time committed to the regular work week. Consultation must neither be in conflict with, not detract from the faculty member's assignments at the University.

Faculty members engaging in consulting activities are required to inform their department chair of the commitment of time involved prior to their acceptance of the obligation. The Consulting Service Report From is to be used for this purpose.

2. Professional associations

Recognizing that membership and participation in professional organizations and associations affords faculty members opportunities to contribute to the development of their disciplines, the University encourages all faculty members to be active in the professional organizations of their choice. Fees for individual memberships are not paid by the University.

For special conferences, institutes, and workshops for University faculty and administrative staff, the University may pay travel expenses, per diem, and fee charges for individuals.

3. Publications

Faculty are encouraged to be involved in scholarly activities. There are no University or Departmental policies which state in what form these activities must take. Publications, presentations, grant proposals, research projects, consulting, and artistic works may be considered scholarly.

4. Research

Indiana State University fully supports research activities by faculty. A few of the supporting initiatives are described below:

a) Statistical and Research Design Consultation

The Center for instruction, Research, and Technology (CIRT) supports faculty and graduate students in developing and executing complex research programs. CIRT facilitates their use of information technology in research, specifically, software for statistical analysis, graphing, and reference database management. CIRT provides consultation and training at no cost in various support areas to make researchers more effective and efficient in their studies. ISU supports a variety of statistical packages including *AMOS*, *Minitab*, *SAS*, *SPSS*, and *EQS*.

b) Online Survey Development and Support

ISU assists faculty to collect survey data online with Web Forms. Web Forms is an online survey and forms product from Unidigm which simplifies the posting of online forms or surveys. Web Forms allows researchers or administrative staff to build a survey, collect data, and analyze results without having to know Web programming or database design.

c) Grant Writing Services

The CIRT offers support for grant-seeking endeavors within the areas of institutional curriculum and instructional and research technologies. Assistance is available to identify appropriate funding, facilitate collaborations, assist in proposal writing, edit proposals, develop evaluation plans, and develop budgets for IT components.

5. Continuing education

Faculty are encouraged by the University and CM Program to keep abreast of current trends and developments in their respective areas of expertise. To this end, Indiana State University created the Center for Instruction, Research, and Technology (CIRT). The mission of the CIRT is to explore, develop, promote, and support effective teaching and research practices to advance knowledge and active learning. In order to support this mission, the CIRT Provides assistance to faculty members in the following areas:

a) Professional Development, Instructional Design, and Training

Some of the programs offered by the CIRT are faculty learning communities, Blackboard course development, teaching and graduate student professional development, and a variety of other pedagogically based activities. Assistance is offered in group workshops as well as one-on-one instruction. The Center is equipped with the latest tools available to faculty at ISU in classroom technology. A specialized library provides recent texts and articles in the areas of teaching, learning, assessment, and, many other topics. A very helpful program offered by the CIRT is classroom observation. By videotaping instruction and administration of student questionnaires, the Center can offer faculty valuable insight in their delivery practices. Many of the staff at the CIRT are involved in POD, the Professional and Organizational Development Network in Higher Education and MERLOT, the Multimedia Educational Resource for Learning an On-line Teaching. The CIRT staff has developed self-study tutorials available on many of the software packages used by faculty and staff. ISU has contracted with the Makau Corporation to provide self-paced computer-based training (CBT). Modules covering more than 40 products are available.

b) Instructional Materials Development and Research Support

The CIRT supports grant writing, research design, evaluation, and assessment. The interactive and multimedia design unit provides both traditional print and 3-D computer-aided graphic design services. The Interactive and Multimedia Design Services (IMDS) unit provides on-campus production support for educational graphic and visualization projects of ISU faculty members and staff. The IMDS offers a broad range of educational support services including: digital illustrations for academic journals and poster; large format printing for educational and research presentation posters; mounting and lamination; digital 3-D animations and models; virtual 3-D interactive environments; and other multimedia projects. IMDS products can be used for both on-line delivered courses and those in traditional classroom environments.

c) Grant Support

The CIRT supports grant-seeking endeavors focusing on technology, curriculum development, and instruction. Support is available for multi-disciplinary and institutional projects, individual grants for research, or instruction that incorporates a substantial information technology component, and start-up funding that will lead to larger external submissions. Personal assistance to faculty may entail: searching funding opportunity databases for potential sources of funding; writing or editing of IT components and related evaluation sections of grant proposals; developing budgets for IT components; and possible other support as resources allow.

To facilitate the incorporation of new technologies in research and instruction at ISU, CIRT also coordinates the IT Innovations Mini-grant Program with two rounds of submissions each year. The mini-grant program is a competitive internal grant program to support a wide range of innovative activities in which ISU faculty incorporate new information technology or creative uses of information technology in research and instruction. Faculty incentive grants are awarded in two specific areas that: 1) address the intent of infusing information technology into education, and 2) expand faculty information technology-based research activities.

d) Research Design, Evaluation, and Assessment

The statistical research and design and evaluation services unit of CIRT provides consultation and training opportunities. Statistical and research methodology support is given in all disciplines through the use of both traditional and new and emerging qualitative and quantitative research software. Consultation services can include design and analysis of sample surveys; choosing of appropriate statistical methods and software; interpretation of statistical analysis outputs; and graphical and tabular presentation of statistical data. CIRT also offers free training programs that are flexible and designed to enhance active learning through hands-on experiences.

CIRT evaluation services include the design and development of evaluation methodologies, critiquing and development of instruments for research and evaluation, and evaluation of grant proposals and projects that contain substantial technology components. CIRT staff also organize and implement interview sessions, usability testing, focus group meetings, and surveys that facilitate the assessment of new and emerging technologies before deployment for teaching and research.

e) Academic and Emerging Technology Support

The CIRT also provides academic programming support to the University community. CIRT creates customized interfaces and programs for Web applications, specialized

databases, hand-held computers, high-performance computing, and other faculty technology-driven endeavors. One of CIRT's main goals is to continually explore and evaluate new and emerging technologies to support teaching, research, and student learning. The digital sandbox, a small computing facility, is available to help expose faculty to high-tech tools they may want to incorporate into their teaching and research activities.

CIRT recently implemented an AVID digital video storage system which enables students and faculty to centrally store and collectively edit large video projects form several campus locations via gigabit Ethernet. Additionally, a digital media repository has been created to foster the storage, indexing, and searching of digital artifacts developed at Indiana State. Digital artifacts often include rich media such as images, audio, video, graphics, logos, Web pages, presentations, and theses.

One of the more successful new emerging technologies to date is the Macromedia Breeze system. Breeze is a robust web-communications tool that allows students and faculty to engage virtually from anywhere around the world. Breeze is utilized for distance education, virtual office hours, remote presentations, dissertation defenses, and international collaboration. Additionally, voice-annotated PowerPoint slides, advance learning objects, and supplemental course material can be easily uploaded to the Web and incorporated into learning management systems such as Blackboard.

CIRT is working collaboratively with faculty to provide and incorporate classroom response systems in their instruction and research. Indiana State utilizes an infrared solution that allows students to inexpensively interact with classroom lectures using handheld remotes providing faculty with instant feedback.

V. STUDENTS

A. ADMISSION STANDARDS AND PROCEDURES

1. Describe standards and procedures for the admission of students to the construction program. Differentiate, if necessary, between freshmen, external transfers, and internal transfers.

a) General Policy

Indiana State University, in affirming its commitment to excellence, recognizes the value of a student population reflecting academic achievement, cultural diversity, and special talent. The University's admissions policies allow for the individual consideration of each applicant and help service a student population with these characteristics. The primary criterion for admission is evidence that a candidates prepared to succeed in a degree program. Admission standards are stated in terms of traditional school and college grading systems. For applicants whose records include either a high proportion of nontraditional grades, or a subject pattern which departs markedly from that normally associated with university study, additional evidence of academic potential in support of their applications, such as entrance examinations, interviews, and letters of recommendation, may be requested. The admission of applicants who are older than the traditional college age will be determined individually, with special attention given to employment experience and motivation. Individuals may seek exceptions to any of the requirements below by petitioning the Admissions Committee to consider additional factors that may indicate college potential. A limited number of students may be admitted on condition that they agree to follow a prescribed course of study and advisement.

b) Application Procedures

To be considered for admission candidates must submit a completed admission application, a $25 non-refundable application processing fee and have official transcripts sent directly from all secondary and post-secondary institutions (see the Required Transcripts section) to the Office of Admission. Applications may be submitted electronically or downloaded from the Web site and sent to the Office of Admission. In addition, applications can be requested from the Office of Admission or obtained from a school guidance counselor. Visit the University's Web site at http://www.indstate.edu and follow the links to the admissions office page.

(1) Admission to Academic Programs

Admission to the University does not guarantee admission to a given academic program or enrollment in specific courses. Applicants are asked to designate their intended major area of study on the application. The academic divisions of the University which may have additional admission requirements will notify applicants of these standards. See appropriate *Catalog* sections under academic departments and the professional colleges for further details regarding program admission criteria.

(2) Application Closing Dates

Applications for freshman admission may be filed after the student has completed the junior year in high school. Transfer applicants may apply as early as one academic term in advance of their intended semester of enrollment. To ensure full consideration, applications and official transcripts must be received in the Office of Admissions before the following closing dates: *Fall Semester July 1 **Spring Semester December 1 First Summer Session May 1 Second Summer Session July 1

Early application is encouraged.

*No student may be admitted for the fall term after August 15. Applicants for fall semester, whose files are incomplete as of August 15, will not be allowed to enroll until the subsequent term.
** No student may be admitted for the spring term after December 15. Applicants for spring semester, whose files are incomplete as of December 15, will not be allowed to enroll until the subsequent term.

c) Admission Requirements—All Students

(1) Required Transcripts

It is the responsibility of all applicants to request official transcripts from each school or collegiate institution previously attended. Transfer students who have earned 24 or more transferable semester credit hours need not ordinarily submit a high school transcript. However, transfer students who have not completed foreign language study at their transfer institution, but did complete a minimum of two years of study of a single foreign language in high school (with a C average in all foreign language courses), should have their high school transcript sent to the Office of Admissions where the completion of the foreign language requirement will be recorded. To be official, all transcripts must be sent directly from the registrar's office of the schools previously attended to the Office of Admissions at Indiana State University. All such documents must be received by the above closing dates to ensure consideration.

(2) Test Scores

Freshman applicants under 24 years of age and transfers who have completed fewer than 24 transferable semester credit hours must submit scores for the SAT or the ACT. Test scores are used to obtain a measure of the individual's academic aptitude, to assist in academic advising, and to assure proper course placement.

d) Admission Requirements—Freshmen

(1) High School Curriculum

All Indiana high school graduates after 2001 must pass both the mathematics and English sections of ISTEP or receive an official waiver from their high school in order to gain admission to the University. Indiana State University currently recommends the following high school course curriculum. Students who graduate from high school in 1998 or after are expected to complete the Indiana graduates) to qualify for unconditional admission. Indiana Core 40 includes the following:

(a) Language Arts—eight credits in literature, composition, speech.

(b) Mathematics—six to eight credits from: Algebra I and II, geometry, trigonometry, calculus.

(c) Science—six credits in laboratory science divided as follows: two—biology; two—chemistry or physics; two—advanced biology, chemistry, physics, or earth/space science.

(d) Social Sciences—six credits as follows: two—U.S. history; one—U.S. government; one—economics; one—world history and/or geography; one additional course from above or other social studies areas.

(e) Directed Electives—eight credits of additional courses in the above subject areas or courses in computer applications, fine arts, foreign languages, or a technical career area. 6. Physical Education—one credit (two semesters).

(f) Health/Safety—one credit (one semester).

(g) Electives—two to four more credits from any courses offered at the high school.

(2) Academic Achievement

Freshman candidates applying directly from high school are expected to be ranked in the upper 40 percent of their high school class. Students whose academic achievement is below this level or who do not present Core 40 are reviewed on an individual basis. Additional consideration will be given to standardized test scores, the rigor of the high school curriculum, grades earned in academic subjects, and other evidence of academic potential. Employment experience and motivation will be considered also for those who chose not to enter college immediately following high school. A limited number of students may be admitted conditionally into the Academic Opportunity Program if they agree to participate in services offered through the Student Academic Services Center.

(3) Sycamore Advantage Registration Program

Fall and spring semester freshman are strongly encouraged to attend the Sycamore Advantage registration program held in June and early January of each year, respectively. Any freshman who fails to attend this program will not be allowed to register for classes before attending the "Knowing Sycamores" Orientation program and completing a consultation with Student Financial Aid.

e) Admission Requirements—Transfer Students

Transfer applicants normally are eligible for admission if:

(1) Their high school records meet the freshman criteria listed above (NOTE: Applicants whose high school records do not satisfy freshman requirements may be considered for admission after earning at least 24 transferable semester hours from another regionally accredited collegiate institution);

(2) They are in good standing at their last accredited institution; and

(3) They have earned a cumulative grade point average of 2.0 (C average) in all college level studies.

NOTE: Some programs require higher standards for admission. Students should consult the section of this Catalog that describes the academic program they wish to enter.

f) Additional Information for Transfer Students

(1) Transfer of Credit Evaluation

The academic dean of the college of the student's intended major determines the transferability and applicability of transfer credit hours. Transfer credit will be re-evaluated if a transfer student changes his/her degree program.

(2) Transferability

The following guidelines govern transfer of courses:

(a) Only transfer credit hours earned in college-level courses (typically numbered 100 or higher) from a regionally accredited college or university will be assigned credit.

(b) Only transfer courses in which a grade of C or higher was earned will be assigned credit; courses with a grade of C- or below will not be assigned credit.

(c) A maximum of 94 hours of transfer credit may be assigned toward a bachelor's degree; a maximum of 47 hours of transfer credit may be assigned toward an associate's degree. Transfer credit hours are assigned only for college-level courses.

(3) Applicability

Application of transfer credits depends on the student's choice of degree program. Transfer credit will be re-evaluated if transfer students change their degree program. Transfer credit may be assigned as course equivalency or as elective credit as described below:

(a) *Course equivalency* means that a transfer course is deemed equivalent to a specific Indiana State University course in the major, minor, or General Education Program by the appropriate department/academic unit. Some course equivalencies have been established through existing agreements between Indiana State University and other colleges and universities; other equivalencies will be determined on an individual basis.

(b) *Elective credit* is assigned for courses that meet transfer requirements, but for which no equivalency is determined. Elective credit is usually applied toward total earned hours and may also apply to the major, minor, or General Education Program. The decision to apply transfer elective credit in a program is made by the appropriate academic unit.
Students who submit official transcripts from regionally accredited colleges or universities to the Indiana State University Office of Admissions should review their Degree Audit Report, which identifies the status of each course and the total number of hours transferred to Indiana State University. After reviewing the Degree Audit Report, students may request a reconsideration of their transfer credit evaluation from the academic dean's office in the college of the student's intended major. Students access the Degree Audit Report through myisu.indstate.edu.

(4) Articulated Programs

Indiana State University has established articulation agreements with several colleges and universities that allow students to complete a specific associate degree program at another institution and receive up to 94 hours of credit toward a specific bachelors degree program at Indiana State University. Each articulation agreement will stipulate the Indiana State University courses needed to complete the bachelors degree program and any requirements or guidelines that govern a particular agreement (for example, course and cumulative grade point requirements that differ from the University's general requirements). Students should review the articulation requirements presented by the appropriate Indiana State University college or by their chosen program at the institution from which they intend to transfer. The Office of Degree Audit and Transfer within the Enrollment Services Unit maintains current listings of articulated programs and course equivalencies between Indiana State University and other colleges and universities. Interested students should consult the Web site:

http://web.indstate.edu/transfercentral

(5) The DegreeLink Program

Students who have earned articulated associate of science (A.S.) degrees, associate of applied science (A.A.S.) degrees, or have accumulated credit hours from accredited

collegiate institutions may be eligible to enroll in DegreeLink programs on the Indiana State University campus or through Distance Education. (See the DegreeLink Program description in this Catalog.)

g) Admission by Exception

Applicants whose academic records do not satisfy the requirements listed above may petition the Admissions Committee for special consideration. The petition provides an opportunity for students to describe factors, which may have led to inadequate academic achievement, and their educational goals and motivation. Applicants admitted by exception are placed on academic probation during their first semester of enrollment. If they are unable to achieve at least a 2.0 grade point average during their first semester at Indiana State University, they will be subject to academic dismissal (the minimum GPA required of students on probation differs by number of earned hours; see Retention Standards elsewhere in this Catalog).

h) Admission Requirements—International Students

Because of the variety of educational systems throughout the world, there are broad admission requirements for international students. Applications are reviewed individually by the International Affairs Center (IAC), and an evaluation is made of all credentials associated with the academic qualifications and intended field of study of the applicants. Interested students may contact the International Affairs Center.

International applicants are expected to demonstrate evidence of academic potential. In addition to evidence of academic potential, international students must demonstrate financial responsibility and English language proficiency. The Test of English as a Foreign Language (TOEFL), taken at a national or international test site, is normally required as an indication of proficiency. Students may also be admitted with residual TOEFL scores (through TOEFL testing on campus), or without TOEFL scores if they are able to demonstrate proficiency in English through other means, such as course work completed in an accredited American institution, or by completing the Interlink ESL Program available on the ISU campus.

International students should apply early to be assured of timely completion of the admission process. They should contact the United States Consulate concerning the time required to process the education visa, and wait for official notice of admission before traveling to the United States for attendance at Indiana State University. Once admission has been granted and an I-20 visa issued, it is the responsibility of the applicant to make all the necessary arrangements for entrance into the United States and for residence in the State of Indiana throughout the duration of study at the University.

(1) Transfer of Credit for International Students

International students may request to transfer credits from a foreign or an American accredited collegiate institution. International student transcripts are reviewed by the International Affairs Center. The academic dean of the college of the student's intended major determines the transferability and applicability of transfer credit hours. Transfer credit will be re-evaluated if transfer students change their degree program. Transfer credit hours are restricted to college-level courses from institutions accredited by the ministry of higher education in the home country and must meet a minimum standard grade deemed equivalent to a C or higher in the United States higher education system.

The total number of credit hours which may be applied from a foreign university is assessed in terms of the level of accreditation granted to the institution by the ministry

of higher education in the country of origin. The total number of hours that may be applied to an Indiana State University baccalaureate degree cannot exceed 94.

Students transferring from institutions of higher education abroad with which Indiana State University has developed program articulations will receive transfer credit in accordance with the provisions of the articulated program agreement.

2. *Describe the philosophy of the construction program related to transfer credits, substitutions for required courses, and advanced standing for transfer and special students.*

Indiana State University and the Construction Program accept most transfer credits from accredited post-secondary institutions. Course grades must be a "C" grade or better to transfer. Details from the undergraduate catalogue are listed above. A maximum of 94 hours can be transferred to a four-year bachelor's degree. The CM Program has established articulation agreements with Ivy Tech and Vincennes University. Articulation agreements establish course-by-course transfers. Course-by-course transfers are established only after ISU construction faculty members carefully review syllabi and course content of proposed courses. Articulated courses are listed on a Web site titled the Course Applicability System (CAS):

http://www.indstate.edu/isu-cas.

This is a very useful tool for both interested students and advisors. Courses from construction programs that do not have an articulation agreement with the ISU Construction Management Program are considered on an individual basis. Courses at other colleges that are not sufficiently similar to ISU CM Program courses transfer with a 001 course number, which means that the hours count toward the degree, but the course does not substitute for a specific ISU construction course. Construction advisors try to accommodate transfer students as much as seems reasonable.

Indiana State University provides a process that allows course substitutions. It is the philosophy of the CM Program to accommodate students that cannot take a required course in a timely manner due to circumstances beyond their control. This may occur because all required courses may not be offered every semester. It provides construction advisors some flexibility to allow students to graduate in a reasonable time. Course substitutions must be justified and approved by the advisor, department chair, and associate dean.

Indiana State University offers opportunities for students to earn credit toward a degree for knowledge they have acquired independently, at work, in the military, through workshops and special classes, and in other ways. The CM Program considers each student and course credit on an individual basis. If a student believes that he or she is proficient in a particular course content (AutoCAD, for instance), then he or she discusses this with the course instructor. If the instructor thinks the request is reasonable, the instructor may offer the student a placement exam (perhaps the final exam for the course). If the student passes the placement exam, the instructor is allowed to extend full credit for the course. Actually, this does not occur very often. Students tend to be over-confident about what they know or what they can do. "Block" credit for experience is not allowed by the CM Program.

3. *Describe the control the construction unit has over the quantity and quality of new students.*

The CM Program does not impose any requirements above and beyond the University admission requirements listed above.

B. Quality of New Students

1. Indicate the quality of the new students for the most recent full year. Show the average values.

Table 21: Quality of New Students Admitted in 2008

Year	ACT – SAT Scores		
	Verbal	Math	V & M
ACT			948
SAT			18.8

C. Enrollment Data

1. Indicate the total number of students enrolled in the construction program during the fall semester for the past five years.

Table 22: Enrollment

Year	2003	2004	2005	2006	2007
Undergraduates					
Freshmen	37	31	37	48	26
Sophomores	30	27	33	29	38
Juniors	26	36	28	29	33
Seniors	49	39	38	39	49
Total Undergraduates	142	133	136	145	146
Graduate Students					
Masters	NA	NA	NA	NA	NA
Doctoral	4	8	11	7	7
Total All Students	146	141	147	152	153

2. Provide tabular data that indicate the appropriate number of full-time and part-time undergraduate students for the fall semester for the past five years. Define the institution's method of accounting for part-time students.

Table 23: Full and Part-Time Enrollment

Year	2003	2004	2005	2006	2007
Full-time	135	127	131	134	132
Part-time	7	6	5	11	14
Full-time equivalent	143.2	135.8	136.9	140.5	140.2
Total Enrollments	142	133	136	145	146

Undergraduate students enrolled in twelve or more semester hours are considered full-time students. Those with fewer than twelve semester hours are considered part-time students.

D. GRADING SYSTEM

1. Briefly describe the institution's grading system.

a) Letter Grades for Course Work

Letter grades indicating the quality of course work completed and for which the semester hours credit earned can be applied toward graduation requirements generally can be interpreted as follows:

A,	excellent
B+ and B,	superior
C+ and C,	fair
D+ and D,	poor
S	satisfactory (when applicable)
U	unsatisfactory (when applicable)
F	failure
DP	passing at the time of drop
DF	failing at the time of drop
WF	failing at the time of withdrawal
WP	passing at the time of withdrawal
IN	incomplete

DP, DF, and WP grades are not calculated in the student's grade point average. WF grades are calculated in the student's grade point average as an F.

b) The Incomplete

An incomplete grade may be given only at the end of a semester to those students whose work is passing but who have left unfinished a small amount of work—for instance, a final examination, a paper, or a term project which may be completed without further class attendance.

c) Course Repeat Policy

Any course may be repeated once for grade point average improvement. Only course taken at Indiana State University are eligible for course repeat. The better grade earned will become the grade for the course. The lesser grade remains recorded on the transcript, but hours and points of the lesser grade will not be used in index computation.

d) The Grade Point Average

The grade point average is a numerical value which is obtained by dividing the number of grade points earned by the number of hours attempted. This average, often called the *Index*, is computed at the end of each semester and on a cumulative basis. Grade points per hour are assigned as follows:

A	4.0
B+	3.5
B	3.0
C+	2.5
C	2.0
D+	1.5
D	1.0
F	0.0

2. *Describe any special grade requirements established by the construction unit.*

Construction students must have a grade point average of 2.5 or higher in technology courses.

3. *Describe the institution's procedure for recognizing academic excellence.*

a) Dean's List

A list of students recognized for academic achievement is prepared each semester in the Office of Registration and Records after grade processing, which occurs after the close of the term. This Dean's List includes full-time students whose semester grade point average is 3.75 to 4.00. Students of sophomore standing or upper classmen who have a cumulative grade point average of 3.75 or better are designated Collegiate Scholars.

b) Graduation Honors

Honors achievements of graduating seniors are recognized by Indiana State University at commencement and on diplomas and transcripts. Honors are granted to baccalaureate candidates on the following grade point averages:

Summa Cum Laude	3.95 +
Magna Cum Laude	3.80 through 3.94
Cum Laude	3.60 through 3.79

c) Honors Convocation

A tradition of long standing at Indiana State University is the annual Honors Day Convocation held each spring, usually in April. At this all-University assembly, appropriate recognition is given to individuals and groups of students who during the current year have earned acknowledgement of superior achievement.

d) Sigma Lambda Chi

The Construction Program sponsors a chapter (Delta III) of Sigma Lambda Chi, the honorary society for construction. Initiates must meet the following qualifications:

- Undergraduate students must have completed 60 hours toward their degree.
- Students shall have a 3.25 cumulative average on a 4.0 basis in the courses credited toward their degree.

- Their leadership, character, and personality traits give promise of reflecting credit upon Sigma Lambda Chi.
- They have an affirmative vote of three-fourths of the active members present, quorum required.

4. Describe the institution's procedure related to poor student performance—probation, suspension, and readmission.

a) Requirements for Continuing Enrollment

The cumulative grade point average is used to indicate the academic standing of students at the end of any semester or summer term and will determine their eligibility for continued enrollment.

(1) Good Standing

A student must maintain a C (2.00) cumulative grade point average to be considered in good academic standing by the University.

(2) Academic Probation

If a student's cumulative grade point average is less than 2.00, the student will be placed on academic probation. Students on academic probation will not be permitted to take more than 13 credit hours. Students on academic probation will be assigned midterm grades so they are aware of possible academic difficulties early in the semester. Students who are on academic probation are strongly encouraged to repeat courses in which F or WF grades were received.

b) Dismissal

Students who meet the following criteria will be academically dismissed:

- Freshmen who are on probation and earn a semester grade point average of 1.70 or less;
- Sophomores who are on probation and earn a semester grade point average less than 2.00;
- Juniors and seniors who are on probation and earn a semester grade point average less than 2.20.

c) Readmission

Former Indiana State University students who have interrupted their studies for more than two calendar years must apply for readmission through the Office of Admission. Students who have attended other colleges or universities during their absence from Indiana State University must have official transcripts from those institutions forwarded directly to the Office of Admission.

(1) Unconditional readmission.

Students who have maintained at least a 2.0 cumulative grade point average at the other institutions and left Indiana State University in good academic standing are eligible for unconditional readmission.

(2) Readmission on probation.

Applications from students who were academically dismissed from Indiana State University will be reviewed in the Office of Admission and by the academic dean of the college of the student’s intended major. Former degree seeking students cannot

enroll as non-degree students if they are on academic probation or have been academically dismissed. No student may be readmitted if academically dismissed three times. Applications from students who left ISU in good standing, but experienced academic difficulty at a different institution will also be reviewed by the academic dean of the college of the student's intended major. Students readmitted on academic probation are expected to earn the required minimum grade point average in their first return term or are subject to academic dismissal.

5. *Comments*

E. Academic Success and Failure

1. *Indicate the number and percentage of the students that were on the honor roll during the past year.*

Table 24: Dean's List Students

Classification	Fall 2007		Spring 2008	
	No.	%	No.	%
Freshmen	1	3.8	1	6.3
Sophomores	2	5.3	3	7.7
Juniors	4	12.1	1	4.2
Seniors	8	16.3	10	17.0
Total	15	10.3	15	10.9

2. *Indicate the number and percentage of students that were on academic probation during the past year.*

Table 25: Probation Students

Classification	Fall 2007		Spring 2008	
	No.	%	No.	%
Freshmen	3	11.5	2	12.5
Sophomores	5	13.2	3	7.7
Juniors	0	0	0	0
Seniors	0	0	0	0
Total	8	5.5	5	3.6

3. *Indicate the number and percentage of students that were lost due to dismissal, withdrawal from the institution, or transfer to another program during the past year. Do not include graduates.*

Table 26: Attrition

Classification	Fall 2007		Spring 2008	
	No.	%	No.	%
Freshmen				
Sophomores				
Juniors				
Seniors				
Total				

4. *Comments*

F. RECORD KEEPING

1. *Describe the academic record-keeping procedures of the construction unit, including the final graduation audit. Include, in the appendix, a copy of principle forms used.*

The official academic record keeping for the Construction Management program is facilitated through the office of the Associate Dean of the College of Technology, Dr. Jeff McNabb. The Academic Associate maintains a paper folder for each student that contains admissions information, official communications with the student, copies of emails sent to / received from the student, petitions for substitution, and any other documentation that is not stored by the University in Banner or Nolijweb. The Program Assistant meets with students regarding scheduling issues and also helps to keep them on track in their progress toward graduation.

The student uses a DARS report (which includes all transfer work accepted by Indiana State University) and Curriculum Guidesheet to track his progress toward graduation. As the student approaches the latter part of the Junior year the Academic Associate uses the Curriculum Guidesheet, DARS, information from the Catalog, and the Banner grade record (SHACRSE) to complete a Checkout, which confirms for the student which classes have been complete and which are still needed, and where he stands as far as meeting overall university requirements (residence hours, upper level hours, total hours, gpa).

After grades are posted for the term in which the student has applied for graduation, the Academic Associate does a final check to determine if all program and university requirements are fulfilled and sends that information to the Office of Registration and Records. This office also checks to be certain university requirements were fulfilled prior to certifying the graduation.

Forms used by the Assistant Dean's office are located in the Appendix.

2. *Describe the interface with the institution record-keeping system.*

This is accomplished primarily through the Degree Audit Reporting System (DARS), which is available to students, advisors, and administrators via the University's web site. Specific questions not provided by the DARS system, may be addressed directly to the Assistant Dean's Office.

Another resource for University records is SCT Banner, which is a comprehensive application suite available to all authorized personnel. SCT Banner consists of Internet-native software applications for student information, advancement, human resources, financial aid, financial management, and more.

3. Comments

With few exceptions, the DARS system is reliable and easy to use. A DARS document indicates which requirements for graduation have been completed by the student and which requirements have yet to be completed. The DARS system lists University requirements. Any over-riding program requirements must be communicated to the students by the advisor. At present, the only over-riding program requirement is Physics 105 instead of Physics 101 (due to ACCE requirements).

G. ACADEMIC ADVISEMENT

1. Describe the academic advisement procedure used by the construction program.

a) Sycamore Advantage

Sycamore Advantage is a University outreach program designed to help new students prepare for a successful first year. Parents and family members are encouraged to attend. On-campus accommodations are available for students and family. Some of the opportunities provided by Sycamore Advantage allow participants to:

(1) Gain strategies to help the student succeed at ISU;

(2) Receive important academic information;

(3) Meet with financial aid staff;

(4) Visit the resource fair and campus services;

(5) Learn about student health and campus safety; and

(6) Tour the campus.

b) Academic Advisement Center

All students who have not declared a major area of study (non-preference students) and all non-degree students are advised in the Student Academic Services Center. The Center serves as the designated "college" of enrollment for these students until an official major has been declared. The purposes of the Center are:

(1) To help freshmen adjust more easily to the academic processes of the University;

(2) To assist in selecting academic majors, in choosing wisely the specific courses needed to attain these goals;

(3) To coordinate the participation of faculty in the advisement of students; and

(4) To function as a resource center for materials and information concerning undergraduate curricula and general education requirements.

Primarily, the Center serves freshmen and sophomores. Students are provided an opportunity to discuss academic concerns in confidence with counselors, and arrangements are made for students to confer with faculty members concerning career opportunities in various academic areas.

When a student chooses a major area of study, his or her records are then transferred to the chosen college, and the academic dean of that college provides the student with a faculty advisor in the student's major area.

The Student Academic Services Center is centrally located on the second floor of Gillum Hall, and is open throughout the year during regular office hours.

c) MCT 133, Introduction to Construction Technology and Management

Class scheduling, including prerequisites, is explained to the incoming students enrolled in MCT 133. Each student is expected to complete a four-year plan of study indicating the semester in which each required course will be taken.

d) Faculty Academic Advising

When the student has chosen an area of specialization, he or she is referred to a regular faculty member who serves as the academic advisor. Data including the student's personal biography, high school rank, and rating on the freshman orientation and achievement examinations are supplied to the advisor. The adviser assists the student in planning the best use of his or her time in acquiring good study habits and in referring the student to special services on the campus as needed.

e) Centralized Scheduling

Beginning in the fall of 2007, the College of Technology began centralized scheduling which is administered by the Associate Dean's office. Construction faculty still assume advising duties but are freed from the time intensive process of course scheduling. Advising duties are concerned with almost any issue not related to course scheduling such as career choices, graduation requirements, employment, and personal problems. Construction faculty are satisfied with the new policy.

In their junior year, students are encouraged to request a senior checkout from the Assistant Dean's office. A senior checkout helps to eliminate any unpleasant surprises related to graduation requirements.

f) Miscellaneous University Resources Available to the Students

Services available to the students include the Office of Information Technology (OIT), the Afro-American Culture Center, the Audio-Visual Center, the Career Center, the Center for Instruction, Research, and Technology (CIRT), libraries, the Student Academic Services Center, the Student Counseling Center, Student Financial Aid, the Writing Center, the University Testing Office, and the Women's Resource Center.

2. *List the faculty members who are serving as academic advisors, and indicate the number of students assigned to each.*

Table 27: Number of Students Assigned to Faculty Advisors

Faculty Member	Students
Richard Baker	0
Lee Ellingson	52
Chul S. Kim	18

Don McNabb	48
John Reposa	27

3. Comments

New faculty members are typically not assigned any advisees during their first year.

H. STUDENTS ACTIVITIES

1. List the student organizations that are sponsored by the construction unit and/or are primarily for construction students. Include the organization name, the approximate number of members or participants, and a brief statement of purposes and/or activities.

a) Construction Club

The Construction Club is open to any student attending Indiana State University, but by tradition, all members are majoring in Construction Management. The Construction Club is chartered by a written constitution and supported by construction faculty advisors. Responsibilities of membership include attending meetings, voting, and participating in activities and fundraisers. The Club serves as an umbrella organization for two student chapters: National Association of Homebuilders (NAHB) and the Association of General Contractors (AGC). Club dues are $40/yr. Typical activities include field trips, hosting guest speakers, assisting the elderly and indigent in home repairs, fundraising activities such as an annual golf outing, and providing service to the community such as helping Habitat for Humanity. The Club has been very successful at fund raising. Using surplus money, the Club has sponsored student scholarships and team competitions. The number of members varies between 25 to 40 students.

b) Sigma Lambda Chi

Sigma Lambda Chi is the national honorary society for construction. The local ISU chapter is the Delta 3 Chapter of the International Society of Sigma Lambda Chi (http://www2.tech.purdue.edu/bcm/resources/slcintl/). The web site for Delta 3 Chapter is: http://sapphire.indstate.edu/~SLC. Any college student pursuing a curriculum in construction at ISU may be initiated into the Delta 3 Chapter provided that:

(1) Undergraduate students have completed 60 hours of credit toward their degree; graduate and post-baccalaureate students shall be full-time students and shall have completed six months of study towards their degree;

(2) Students shall have a 3.25 cumulative average on a 4.0 basis in the courses credited toward their degree;

(3) Their leadership, character, and personality traits give promise of reflecting credit upon Sigma Lambda Chi; and

(4) They have an affirmative vote of three-fourths of the active members present, quorum required.

Typical activities include fund raisers such as t-shirt sales and raffles, field trips, organizing the annual career fair, and community service. The number of members averages about ten.

2. *Describe the extent to which construction students participate in course and faculty evaluation, in curriculum development and revision, and in other student-faculty activities.*

   ISU provides a course evaluation form (SIR2) to all interested faculty. Construction faculty are encouraged to use these forms or similar material for both formative and summative assessment. The CIRT also provides annual workshops on course assessment and improvement. Faculty members typically include the results from such evaluation forms in their application for promotion and tenure. Construction faculty get to know some students quite well, and informal comments and feedback are a natural result. Student-faculty activities include all of those listed above for student organizations and advising. The size of the Construction Management Program at ISU allows close and informal relationships between faculty and students.

3. *Describe the extent to which construction students participate in campus-wide activities.*

   Some campus-wide activities that construction students often participate in are the ISU Honors Day, campus blood drive, Habitat for Humanity, and Career Day.

4. *Comments*

   Extra-curricular activities provide an excellent opportunity for faculty and students to interact in a more informal setting than the classroom and really get to know each other. We consider these activities to be invaluable for mentoring and for improving the students' resumes.

I. GRADUATES AND PLACEMENT DATA

1. *Indicate the number of degrees awarded during the past five years.*

   Table 28: Number of Graduates

Year	2003	2004	2005	2006	2007
Associate					
Baccalaureate	28	30	26	26	24
Masters	NA	NA	NA	NA	NA
Doctorate		1	2	2	2

2. *Indicate the first career step of the graduates of the past year. Show the number of graduates in each category.*

   Table 29: Placement Data

Type of Employer	No. of Graduates
Construction related employment	
Construction or construction management firm	
Material or equipment supplier	
Owner (utility, R.R. etc.)	
Design or development	

Other	
Continuing education	
Other	
Non-construction employment	
Seeking employment	
No information	
Total	

3. *The average annual salary for the above graduates is $*

4. *Describe the design of alumni tracking objectives, documents, and procedures.*

   The Construction Program has developed a database for alumni which includes their year of graduation, home address, employer name and address, and current job title or description. This database is used for outcomes assessment and informal communications. It is kept as current as possible by formal and informal communications such as job site visits, conferences, career fairs, and electronic messages.

5. *Provide examples of survey or other documents used, and a summary of the results of the most recent follow-up study.*

J. OTHER

If scholarships or other financial aid is available to students in the program, please indicate.

The ISU Office of Financial Aid provides all students with assistance in financing their education. In addition, the following scholarships are available to construction students through the Department of Technology Management:

Construction Club
Terre Haute Homebuilders Association
Indianapolis Association of Estimators
Builders Association of Greater Indianapolis
Association of General Contractors
Home Builders Association
Pipefitters Scholarships
Facilities and services
National Association of Women in Construction
American Society of Professional Estimators
American Concrete Institute
W.E. James Memorial Scholarship
Harry J. Barrick Scholarship
M. Dale McConchie Scholarship

VI. FACILITIES AND SERVICE

A. LABORATORIES

1. *List the laboratories used for courses taught by the construction unit. Briefly describe the space, including furnishings and equipment. List the construction courses that use the space on a scheduled basis.*

Table 30: Laboratories

Bldg.	Rm #	Area	Name	Description	Courses
TA	124	3472	Construction	Open work area with concrete floor and overhead door. Equipped with various tools and equipment. Storeroom and classroom. Sink and countertop.	111 211 218 318 320 418 420
TA	214	1348	Architecture	A suite of spaces with computer workstations, drawing tables, projector and screen, and library. Storeroom and two offices. Sink and countertop.	106 213 306 304 214 314

2. *Discuss whether the space is shared with other academic units and who controls the assignment of the space.*

Neither of the laboratories listed above are shared with other academic units. The chair of the Technology Management Department assigns the use of the spaces.

3. *Comments*

B. CLASSROOMS

1. *List the classrooms used for courses taught by the construction unit. Indicate the seating capacity, furnishings, (i.e., fixed seats, tablet-arm chairs), and environmental problems (i.e., lighting, cooling, noise, sun control).*

Table 31: Classrooms

Bldg.	Rm #	Area	Capacity	Furnishings	Environmental Problems
TA	122	400	30	12 tables w/2chairs each and 6 tablet-arm chairs. Ceiling-mounted projector and overhead projector.	None
TA	204E	1900	77	21 drafting tables, 77 tablet-arm chairs, technology ready.	Shares space with old package lab.
TC	105	3000	100	Auditorium with fixed work surfaces and 95 seats. Multiple projectors and screens.	None

TC	114	500	40	20 tables with 2 chairs each. Ceiling-mounted projector.	None
TC	303	950	28	14 tables w/2 chairs each. Technology ready.	None

2. *Discuss whether the space is shared with other academic units and who controls the assignment of the space.*

   TA 122 is part of the construction lab suite, so it is controlled by the Construction Program.

   TA 204E is part of the old plastics lab that has been converted into a classroom and is technology-enhanced. This classroom is available to all in the College of Technology. It is controlled by the Dean's office.

   TC 105 is a state-of-the-art auditorium controlled by the University and is reserved only for classes with more than forty enrolled students. MCT 133, Introduction to Construction, typically has large enrollments. No major problems have been encountered when requesting this room.

   TC 114 is adjacent to the materials laboratories and is controlled by the chair of the Department of Technology Management. No problems have been encountered with the use of this room.

   TC 303 is adjacent to the offices of the Department of Technology Management and is technology enhanced.

3. *Comments*

C. STAFF OFFICES

1. *List the staff offices for the construction unit. List sequentially by building and room number.*

   Table 32: Staff Offices

Bldg.	Rm #	Area	Occupant
TA	118B	140	Reposa
TA	118A	140	Baker
TC	302C	124	McNabb
TC	302F	124	Ellingson
TC	302G	124	Kim

2. *Discuss the location of staff offices on campus, including proximity to secretarial services, classrooms, laboratories, library, and computers.*

   The architecture and construction laboratories are located in the older technology building (TA). The office of the Department of Technology Management is located in new technology building TC 302). The two technology buildings are connected by an enclosed sky-bridge. The secretary, copiers, and mailboxes are located in TC 302. Four construction offices are located near the laboratories in TA; the others are located in the department office in TC. There are advantages and disadvantages to both locations.

The Cunningham Memorial Library is located on the north side of campus approximately three or four blocks from the technology building. However, faculty members can search all collections and databases using a computer anywhere on campus.

In addition to the architecture computer lab, there are two computer labs in the new technology building. The student computing complex (including a computer supply store) is open 24-hours a day and is located close to the center of campus near the fountain. The University and the Office of Information Technology (OIT) furnish computers to all faculty approximately every three years. Faculty typically get a choice between a desktop or a laptop. All students are required to purchase a laptop computer meeting minimum standards. All major buildings on campus have wireless Internet access.

3. Comments

Construction faculty are allowed to choose their own office location as offices become available.

D. LIBRARY

1. Indicate how books and periodicals may be obtained by the construction unit (i.e., central library, departmental library, interlibrary loan program, Internet, etc.).

Check-out procedures for the Cunningham Memorial Library are similar to comparable institutions. Undergraduates may borrow books for three weeks and graduate students may borrow books for four months. .The loan period for ISU faculty is for 6 months. Books may be renewed up to three times online. Resources include books, periodicals, and audio-visual material. Cunningham Memorial Library Reserves is a collection of course-related materials supplemental to classroom instruction. Materials that professors, instructors, or teaching assistants may place on reserve include library or personal copies of books, journals, videos, slides, audio tapes, and photocopied materials. Photocopied materials are placed on electronic reserve.

Library materials may be searched online from anywhere on campus or remote locations via the library's online catalog. The online catalog also includes the holdings of Rose-Hulman Institute of Technology and Saint Mary of the Woods. ISU students and faculty have barrowing privileges at these institutions. Students and faculty also have access to the WorldCat database. WorldCat is a catalog of more than 100 million books, web resources, and other materials from libraries throughout the world. From this database, you can electronically request items via interlibrary loan.

Interlibrary Loan is a service offered to current Indiana State University faculty, staff, and students. The purpose of ILL is to obtain requested materials not held by ISU from other libraries. Patrons can electronically request items via interlibrary loan from all of the databases provided by ISU. In addition, ISU Interlibrary Loan will process requests from currently enrolled Distance Education students who need materials owned by Cunningham Memorial Library.

The ISU Library also maintains an extensive list of online databases. A number of the databases include full-text articles. The library provides EBSCO LinkSource to assist the patron find full-text articles. EBSCO's LinkSource is a link resolver that enables item-level linking across resources available in a library's collection. LinkSource solves the problem of connecting users to the appropriate content from e-journals, to aggregated full-text databases, to bibliographic records with indexing in secondary databases, to library catalog entries. LinkSource works with the ILLiad software to process interlibrary loans. This requires that all ILL requests be initiated online.

The primary databases to support construction include Academic Search Premier, ProQuest, Business Source Complete, LexisNexis Academic, Science Citation Index, and JSTOR.

Table 33: Library Holdings (Includes e-journals)

	Since last accreditation		Total	
	Books	Periodicals	Books	Periodicals
Construction	263	125	907	284
Architecture & Engineering	375	43	3,653	932
Business & Management	2,920	243	19,972	13,084
Total Institutional Library	3,558	411	24532	14,300

2. *Describe where the books and periodicals related to construction are located (i.e., central library, departmental library).*

The Construction Program maintains a modest collection of trade and professional journals and books. These publications are stored on shelves in TA 118 and TA 21. There is no formal "check out" procedures used for this collection; therefore, it should not be considered a reliable library source.

Most books and periodicals are located in the Cunningham Memorial Library. They can be found on the third floor in the Library of Congress Classification TH. Electronic periodicals are accessible to faculty and students through the library's online catalog.

3. *Describe how the budget for the purchase of library materials for the construction unit is established and how new acquisitions are selected.*

There are no designated department or college budgets for library purchases; however, any faculty member can purchase library materials using the department's supply budget.

Cunningham Memorial Library develops a budget allocation for library resources for the College of Technology. The budget is based on the allocation the library gets from the university and is divided proportionally to the colleges based on the size of the programs. The College of Technology book allocation for 2007-2008 is $12,600.

A faculty member from each department serves on the College of Technology Library Committee. This committee is tasked with assuring that the Cunningham Memorial Library maintains subscriptions to the various trade and professional journals, has copies of all textbooks used in coursework, and purchases new books of interest as they become available. Periodically, about twice a year, the Library Committee distributes notices of new materials that are available and requests faculty to identify books or audio-visual material they would like to see purchased. Almost without exception, these requests are honored.

4. Identify the courses taught by the construction unit that make extensive use of library reference materials, and discuss the utilization.

Table 34: Course Utilization of Library Materials

Course Number	Utilization
MCT 133	Investigate construction industry
MCT 310	Research construction related accidents
MCT 413	Research manufacturer's literature
MCT 414	Investigate contract language and specifications

E. AUDIOVISUAL SERVICES

1. Describe the audiovisual services of the institution.

Just a few years ago, audiovisual services were concerned mainly with loaning faculty and staff video-ready monitors, cameras, and projectors. With the digital revolution, audiovisual equipment, computers, and the Internet are blending into an array of exciting technologies. ISU is committed to position itself at the forefront of information technology. Many of these services are described in the next heading; however, two initiatives of note are the Center for Visualization and the Interactive and Multimedia Design Services.

a) Center for Visualization

Growing interest in visualization and stereography has prompted the Center for Instruction, Research, and Technology to expand visualization resources available to faculty and students. Beginning in the spring of 2006, ISU built four new active learning spaces equipped to handle various faculty members' visualization needs. Science Building, room 020 has become a 20-seat, multi-disciplinary visualization classroom, equipped with stereoscopic projectors, an 11- foot, 16:9 format polarized screen, viewing glasses, and a powerful workstation. Faculty form any college may schedule the room for entire semesters or on a per-class/as-needed basis. Normal Hall, room 121, was also remodeled to become a multidisciplinary visualization laboratory.

Researchers and instructors now have access to both active and passive stereoscopic systems. One of the systems in Normal Hall is capable of displaying high-definition/high-resolution objects on a 14-foot large format screen. Included in the laboratory is a three-dimensional laser scanner capable of creating digital representations of objects in their natural environments. This scanner has recently been used by faculty to create digital artifacts of clay pots recovered from an archeological dig. In addition, a powerful rendering cluster combining supercomputing and visualization technologies used to simultaneously process 3-D graphics, imaging, and video data in real time, is available to help faculty tackle the most demanding visual computing challenges. Visualization applications are available for many disciplines including science, art, business, and technology.

b) Interactive and Multimedia Design Services (IMDS)

This unit is administered by the Center for Instruction, Research, and Technology (CIRT). The IMDS provides on-campus production support for educational graphic and visualization projects of Indiana State faculty members and staff.

Located in Normal Hall, room 105, IMDS offers a broad range of educational support services including: digital illustrations for academic journals and posters; large format printing for educational and research presentation posters; mounting and lamination; digital 3-D animations and models; virtual 3-D interactive environments; and other multimedia projects. IMDS' products can be used for both online delivered courses and those in traditional classroom environments.

c) Academic Technology Resource Center (ATRC)

The ATRC's mission is to assist faculty and students with course multimedia projects requiring specialized hardware or software not available in the general use labs. The facility is equipped with desktop computers, digital cameras, digital video recorders, and other specialized software. The Center staff can help with digital photography, video editing, Web development, campus course documentation tools, and more. Regularly scheduled technical training sessions are held in the Center and open workplaces are available for production work. CIRT staff members are on hand to answer any related questions. The facility is self-service and there are no charges for use or output, except for printing. The center is located in the lower level of Normal Hall and is open from 8:00 a.m. to 4:30 p.m., Monday through Friday.

2. *Describe the audiovisual resources and the visual aids of the construction unit.*

The construction unit has a collection of construction videos that are available for any courses. Electronic projectors are installed in most classrooms. Overhead projectors are available in all classrooms. TA 214 has a SmartBoard.

3. *Describe the usage of visual aids in the courses taught by the construction unit.*

This is left to the discretion of the instructor. Visual aids are becoming more common with some textbooks providing CDs, DVDs, and/or Internet sites. Some instructors take photographs of construction projects and load them into PowerPoint. The SmartBoard is used extensively in CAD courses, scheduling, and estimating.

F. Computer Facilities

1. *Describe the computer facilities of the institution and the procedure for obtaining time on the computer.*

This question reads like it was written back in the old days of main frames when access was an important issue. Today, computers on campus are ubiquitous. Moreover, computers and multimedia often use the same technology. As Nicholas Negroponte said in his bestselling book, *Being Digital*, "Bits are bits".

a) Internet2

Indiana State is connected to Internet2. Internet2 is a United States university-led consortium with partners in industry and government that interconnects universities, research networks, and advanced educational networks with the goal of developing and deploying advanced network applications and technology. It provides a connection for educators and researchers to virtually every research network in the world, opening the door to greater collaborations and communication.

b) I-Light2

I-Light2 is a premier next generation network designed for research and educational institutions, libraries, and state and local government agencies in Indiana. I-Light2 is in the early stages of development.

c) Laptop Initiative

Beginning in fall 2007, all incoming freshmen are required to have a laptop computer. ISU recommends and supports the IBM/Lenovo ThinkPad. Other brands are allowed if they meet minimum requirements but are not supported by ISU. All laptops are required to have appropriate University software installed.

d) Technology-Enhanced Classrooms

Technology-enhanced classrooms are electronically enhanced lecture halls and classrooms. These rooms create new opportunities in teaching and learning by integrating computer, multimedia, and network technology. There are over 85 technology-enhanced classrooms on the ISU campus for faculty and student use.

e) General Use Labs

There are 12 general use computer labs located across campus. These labs are available for use by all ISU students, staff, and faculty. Currently, three of the labs contain Macintosh systems with the rest containing PCs. Black and white laser printing is available in all labs. Color laser printers are available in select locations. The Office of Information Technology (OIT) computer lab offices are located in the Student Computing Complex (SCC). There are also two 24-hour labs in the SCC. These 24-hour labs are open seven days a week while classes are in session. One of these 24-hour labs is a quiet lab. The quiet lab is available for those students who wish to study without distractions. All labs are staffed with student lab consultants who are available to provide users with computing and printing assistance.

f) Discipline-Aligned Labs

Discipline-aligned labs have a greater variety of types of technology than general use labs. These labs utilize software in a teaching environment designed for the discipline (i.e., interior design, communication, business, education, technology, etc.). Frequently, the software (and often the hardware) in a discipline-aligned lab is non-generic and meets specific requirements of an academic program. ISU currently supports 46 discipline-aligned labs.

g) Distance Learning Classrooms

There are six distance learning classrooms across the Indiana State campus: two in Dreiser Hall and one each in the College of Technology, the College of Nursing, College of Education, and Holmstead Hall. A distance learning classroom allows the instruction in the classroom to be delivered live to students attending class at remote sites across the state, nation, or world. This is accomplished with cameras, microphones, and various transport mechanisms such as IP video conferencing, satellite, and Breeze software.

h) Equipment Checkout and Delivery

A variety of instructional equipment and services are available to support the presentation technology needs of the Indiana State community. A modest inventory of equipment is maintained to satisfy many format and presentation requirements of users. Individuals or

groups may check out instructional presentation equipment for class, department use, or special University events. Equipment for University use is free-of-charge. All equipment is limited in quantity and is available on a first-come, first-served basis. A 24-hour minimum advance reservation is required.

i) Computers in the Library

More than 80 full service computers are available throughout the library. Seven computers are equipped with scanners and one computer has Zoom Text capabilities that will enlarge print and screen and read aloud for the visually challenged. New furniture, computer hardware, and software enable groups of students to collaborate electronically. Currently available are seven state-of-the-art collaborative workstations spread throughout the first floor. More than 300 e-journal, electronic indexes, abstracts, and full-text databases are available to the ISU community via the library's Web site at: http://library.indstate.edu. These databases can also be accessed offsite via the Internet.

j) Computers in Residence Halls

Indiana State's high-speed data network offers students living in residence halls connectivity of up to 10 Mbps to the desktop. All residence hall rooms have an active data and cable TV outlet.

Residential Computing Consultants (RCCs) are students hired and trained by OIT to support the technology needs of students living in residential housing. RCCs live in the residence hall that he or she supports. In many cases the RCCs are already known by many of their fellow students as technology experts.

k) Student Technology Fee

Students at ISU pay a technology fee each semester as part of the tuition and fee structure approved and adopted by the Board of Trustees. The Office of Information Technology (OIT) has responsibility for the management and use of the funds generated by the technology fee. Each budget year, the University Budget Officer, based on anticipated enrollment, establishes a budget which is then used to provide technology services that directly impact students.

2. Describe the computer facilities of the construction unit.

TA 214 has 24 computer workstations.

3. Describe the usage of computers by the construction unit and the students.

The Architectural Lab, TA 214, is in constant use. When a class is not scheduled for this lab, students use the facilities to do their homework and assignments.

G. PLACEMENT SERVICES

1. Describe the institutional placement services.

The ISU Career Center assists graduating seniors, graduate students, or alumni to find relevant and fulfilling employment. Placement is an integral part of the total educational program at Indiana State University; it is a vital function that complements the curricular program in the fulfillment of the educational objectives of the University. The mission statement of the Career Center follows:

"Our mission is to educate and assist ISU students and graduates throughout all phases of their career development, preparing them to meet the challenges of a competitive work environment, and forge dynamic relationships with employers and other relevant constituencies."

The URL for the ISU Career Center is:

http://www.indstate.edu/carcen/

According to the mission statement, the Career Center provides comprehensive services, including career counseling, practice in building job search skills, resume and cover letter writing, interviewing and networking, and a newsletter. The Career Center maintains a student database for three years after graduation. One of the most innovative initiatives of the Center is the annual dinner for graduating seniors. At this dinner, students are briefed in correct dining etiquette in case they are interviewed during a formal dinner. The Center also hosts a career fair each semester.

Placement service fees are not charged to currently-enrolled students. Graduates completing Associate, Baccalaureate, or Graduate degree programs at ISU receive free placement services for one year following month of graduation. Alumni are provided these services for a modest fee.

2. *List the companies that utilized the institutional placement service during the past year that requested interviews with graduates of the construction program.*

No records are kept for this information.

3. *Comments*

Beginning in the fall of 2006, the Construction Management Program began hosting its own career fair. Few construction companies attend the Career Center Job Fair because they do not consider it worth the time and expense unless a large number of student prospects will be in attendance.

Construction faculty also informally help students to find work for both internships and career through their contacts with industry. Occasionally, companies will request time and facilities to interview interested students on campus.

VII. RELATIONS WITH INDUSTRY

A. ADVISORY COMMITTEE

1. List the members of the industry advisory committee, their corporate affiliations, and the type of construction activity they represent.

Micah Boyce	Konover Construction Columbia, MD	Commercial
Dan Browne	Rick Jenkins Construction Co. Terre Haute	Residential and light commercial
William Hann, Jr.	Thompson Thrift Terre Haute	Commercial
Rick Jenkins	Rick Jenkins Construction Co.	Residential and light commercial
Craig Koch	Shiel Sexton Indianapolis	Commercial
Brian Kooistra	C.H. Garmong & Son Terre Haute	Commercial
Bill Ludlow	Weddle Brothers Bloomington	Commercial
Mike Peterson	Thompson Thrift Terre Haute	Commercial
Earl Rogers	Earl Rogers & Assoc. W. Terre Haute	Commercial
Mesha Philley	Clarian Health Indianapolis	Institutional
Lee A. Ellingson	Faculty	
Richard Baker	Faculty	
Chul S. Kim	Faculty	
Don McNabb	Faculty	
John Reposa	Faculty	
James E. Smallwood	Faculty	

2. Describe advisory committee procedures.

Procedures are outlined in the Advisory Board Constitution and By-Laws, which are included in Appendix (Misc.). Beginning in spring 2007, the Board has allowed members to attend and vote electronically. The Dean of the College of Technology and the Chair of the Technology Management Department are typically in attendance.

3. Describe the ways in which the advisory committee has assisted the construction unit.

a) Their companies often hire our graduates.

b) The Board has given advice on new faculty hires.

c) Board members support the Program monetarily by paying membership dues as outlined in the Constitution.

d) Board members offer advice about curricular issues such as which courses to include in the construction minor.

B. CONTRIBUTIONS

1. Indicate the total contributions made to the construction unit during the past year and the five-year total. Show the number of donors in each group.

Table 35: Total Contributions

	2007-2008		Five Year Total	
	Number	Amount	Number	Amount
Const. Association				
Software Companies	1	107,905	4	712,950
Contractors			1	1628
Alumni				
Faculty				
Individuals				
Advisory Board		2600		
Totals		110,505		714,578

Note: The Advisory Board began paying dues in 2007.
Software donations are based on retail value.
The Builders Association of Greater Indianapolis (BAGI), the Association of Professional Estimators, and the National Association of Homebuilders (NAHB) provide scholarship opportunities for construction students.

2. List non-monetary contributions to the construction unit during the last five years.

C. SEMINARS AND SHORT COURSES

1. Indicate the seminars and short courses conducted by the construction faculty for the construction industry during the past year. Indicate the names of the construction faculty that participated as chairmen, group leaders, lecturers, etc.

None

2. Comments

D. RESEARCH

1. *Indicate research, both sponsored and unsponsored, conducted by the construction unit during the past five years. Indicate the sponsors, the amount of the funding, and the major investigator(s).*

   Table 36: Research

Dates	Description	Sponsor	Amount ($)	Major Investigator
2005	Moisture Control	unsponsored		Lee A. Ellingson
2006	Measurement in Construction	unsponsored		Lee A. Ellingson
2007	Construction Waste	unsponsored		John Reposa
2007	Ethics in the CM Curriculum	unsponsored		John Reposa
2006-present	Construction Supply-Chain management	Multi-disciplinary research grant		Chul Kim
2005-present	Mobile construction document using BlackBerry Technology	Multi-disciplinary research grant		Chul Kim
2004-present	Mobile computer based project management system	Multi-disciplinary research grant		Chul Kim

2. *Comments*

E. Work Experience Programs

1. *Describe the co-operative work experience program. Indicate the number of students and companies involved during the past year.*

   All students majoring in Construction Management are required to enroll in and successfully complete TMGT 351, Cooperative Industrial Practice. When enrolled in this course, students must be employed by a contractor or construction-related company, and the students' duties must be approved by their immediate supervisor, the course instructor, the department chair, and the Career Center. Most students are able to arrange their own employment, but occasionally construction faculty provide assistance. Most students take TMGT 351 during the summer. Students are required to keep a daily journal and write mid-term and final reports of their experiences. In the summer of 2007, nineteen construction students completed the course working for seventeen different contractors. In the summer of 2008, twenty-one students completed the course working for eighteen different contractors.

2. *Describe the summer job program. Indicate the number of students and companies involved during the past year.*

   Please see above.

F. Placement Assistance

1. *Describe activities of the construction unit to assist individual employers with the job placement process. (Exclude the institutional placement service, which is discussed in Section VI.)*

   The Construction Management Program assists employers in three ways: One, the Program assists interested companies in planning on-campus interviews. The company representatives are provided a private room for the interviews and students are notified of the opportunity to interview with the company. Two, the CM Program posts job listings that are submitted by construction companies on a designated bulletin board. Three, the CM Program began hosting its own career fair beginning in the fall of 2006. The construction career fair in 2006 was very successful; nineteen construction companies participated. Many students found jobs and internships. Companies that attended the Construction Career Fair in 2007 are listed below:

   American Consulting, Inc.
   American Structurepoint, Inc.
   ARA Construction Corporation
   Atlas Excavating, Inc.
   Bowen Engineering
   Broeren-Russo Construction, Inc.
   Cambridge Companies, Inc.
   C.H. Garmong & Sons
   Crossland Construction
   Duke Realty Corporation
   F.A. Wilhelm Construction Co., Inc.
   Freitag-Weinhardt, Inc.
   Gilbane Building Company
   Hensel Phelps Construction Company
   Hyatt Hotels Corp.
   Industrial Contractors
   Konover Construction Corporation
   Marathon Petroleum Co., LLC
   Mathias Corporation
   Parsons Corporation
   Reith-Riley Construction Co., Inc.
   Shiel Sexton Co., Inc.
   Shook Construction
   Signature Construction LLC
   Thompson Thrift Construction
   Turner Construction Company
   Weddle Bros. Construction Co.
   White Construction Inc.

   The Construction Program at ISU has enjoyed a 100% job placement rate for many years.

2. *Describe coordinated efforts with construction industry associates to place graduates with employers.*

   The Associated General Contractors of Indianapolis have allowed ISU construction students to post their resumes on the AGC/I Web site free of charge. Other industry associates such as the National Association of Women in Construction (NAWIC) and Engineering News Record maintain career center Web sites for job postings. ISU construction students are encouraged to use all of these resources.

G. STUDENT-INDUSTRY INTERACTION

1. *List the national construction associations that sponsor student organizations affiliated with the construction unit. Describe the interaction with the sponsoring association.*

   National associations that sponsor student organizations are:

   a) The National Association of Homebuilders (NAHB). The student chapter of the NAHB is supervised by the Construction Club. NAHB dues are paid out of the Construction Club dues. Students often compete in the NAHB national student competition and attend the national convention. Students are always impressed with these two events.

   b) The Associated General Contractors of America (AGC). The student chapter of the AGC is supervised by the Construction Club. The AGC does not require any dues. The AGC of Indianapolis has been very supportive of the ISU chapter by underwriting competition teams and providing scholarships.

2. *List the major field trips taken during the past year. Include the job location, the number of participants, and the associated course, if any.*

Job Location	Participants	Sponsor	Date
ISU Education Bldg.	21	MCT 213	October 24
ISU Education Bldg.	31	Construction Club	October 24
Union Hospital	24	Construction Club	April 9
ISU Recreation Center	12	Sigma Lambda Chi	April 15

3. *List the guest lecturers for the past year. Include the lecturer's name, topic, date, and course.*

Presenter	Topic	Date	Course
Rob Bundy	Project Management	November 6	Const. Club
Dr. Cho	Project Planning	January 11	MCT 450
Dr. Ryoo	Distributed Computing	January 18	MCT 450
Weddle Bros.	Company Portfolio	February 11	Const. Program
Crossland Const.	Company Portfolio	February 16	Const. Program
Mike Peterson	Submittals	March 21	MCT 450
Brian Kooistra	Jobsite Management	March 28	MCT 450
Glen Baldwin	Client Presentations	April 2	MCT 450
Bryan Duncan	The Bidding Process	April 14	MCT 450

Chris Shober	Bldg. Commissioning	April 23	MCT 213

VIII. PUBLISHED INFORMATION TO THE PUBLIC

A. SELECTED MATERIAL

1. List all program materials prepared for dissemination to the public.

a) Construction Management flyer. A full-color fold-out on glossy paper. Approximately 5.5 x 8.5 inches when folded.

b) College of Technology flyer. A full-color fold-out on glossy paper. Approximately 8 x 10 inches when folded.

c) Full-color DVD with interviews and job-site visits with construction graduates. Approximately 4.5 minutes.

d) Doctor of Philosophy in Technology Management flyer. A full-color fold-out on glossy paper. Approximately 5.5 x 8.5 inches when folded. This flyer covers the PhD Program as well as the specializations such as Construction Management.

e) Construction Management curriculum guide sheet with proposed class sequencing.

f) Undergraduate Catalogue.

g) Class Schedule. This is published every semester. The information is now published online.

B. METHOD OF MATERIAL SELECTION

1. List any institutional requirements governing publication of materials (if appropriate).

The University does have some restrictions on the use of the ISU logo.

2. Describe the process used by the construction program to select materials for publication.

Preparing printed material for publication is a cooperative effort between the CM Program and the Office of the Outreach Coordinator of the College of Technology.

Preparing video materials is a cooperative effort between the CM Program and the multi-media services of the University.

Preparing curriculum guide sheets is a cooperative effort between the CM Program and College of Technology Assistant Dean's Office.

C. METHODS OF DISTRIBUTION

1. Provide a list of sources used to publish program information.

a) University Publication Office

b) Independent venders

2. Describe your program's method of informing the public that this material is available.

Outreach material is sent by mail or personally distributed to anyone interested in the Program. This includes inquiries by telephone, site visits, Sycamore Advantage, recruitment of athletes, and College sponsored activities such as Tech Prep Day. Copies have been sent to high school advisors and community colleges. Construction faculty are encouraged to distribute the material to anyone who might be interested.

IX. GENERAL ANALYSIS

A. PROGRAM QUALITY ASSESSMENT

1. *Program Quality Assessment.*

   The University has established an assessment and accreditation coordinator. The first person to fill this position was Sean McKitrick, who was replaced by Elliot Robins in 2006. The University's web site for assessment is:

   http://www.indstate.edu/acad-aff/77.html

   a) *Describe the academic quality plan in terms of both inputs and outcomes, as it relates to program delivery, teaching, research, and service.*

      The quality assessment plan consists of the following steps:

      (1) Identify goals and mission statement

      (2) Identify specific objectives which correlate to goals and mission statement.

      (3) Develop outcomes or performance criteria for each objective.

      (4) Design or adjust the curriculum to include instruction for all outcomes.

      (5) Identify levels of assessment and implementation to collect feedback about how successfully the outcomes have been achieved.

      (6) Conduct assessments.

      (7) Evaluate assessments to facilitate continuous improvement and provide information for decision making.

      A timetable is included in the Appendix.

   b) *Describe how outcomes assessment results are correlated with mission, goals, program content, and outcomes to implement change where needed.*

      Outcomes assessment is a continuous agenda item for meetings of the construction faculty. *Ad hoc* meetings are scheduled when necessary. Alumni and Senior Surveys specifically address each of the program's objectives. The Employer Survey more specifically addresses student performance. Quantitative and qualitative data are collected for each survey instrument. The construction faculty review results on a continuing basis and make recommendations for curriculum improvements.

2. *Provide a copy of all forms used in the program assessment process. Input from students should be reflected in summary statistics of class and faculty evaluations and documentation of educational achievement, verifiable and in appropriate combinations of senior projects, reviews of student portfolios, and composite test results as evidentiary examples. Graduate data should include job placement rates and employer evaluations.*

   Outcomes Assessment documents are provided in the Appendix.

3. *Provide a summary of the most recent assessment cycle, including a description of the process used to evaluate both inputs and outcomes, and a summary of the results.*

   The most recent assessment occurred in late spring, 2008. This included a review of all three assessment instruments: Senior Survey, Employer Survey, and Alumni Survey. The Senior

Survey is administered to all construction students enrolled in TMGT 430, Senior Seminar. Students are asked to rate each Program objective with a four-point Likert scale, respond to two open questions, and provide any additional comments. The Employer Survey is administered online by the Career Center to all supervisors of construction interns. The interns are rated according to their overall performance. The responses are provided to the Construction Program for analysis and review. The Alumni Survey is distributed every three years and resembles the Senior Survey in that the Program objectives are rated on a Likert scale. Alumni respond to open-ended questions on the back of the survey. Averages are calculated for each Program objective, and comments are aggregated anonymously. Faculty review the summaries, identify Program weaknesses, and make recommendations to address same. More complete documentation is provided in the Appendix. Raw data is available for review in the Technology Management Department. A summary of the survey data follows:

Objectives	**Senior Survey**	**Alumni Survey**	**Employer Survey**
…communicate effectively.	Average score: 3.26	Average score: 3.05 Stronger communication skills and public speaking skills. Offer more networking opportunities.	He could work on his handwriting. Improve written communication skills by continuing to author correspondence.
…be aware of important ethical considerations in the construction industry.	Average score: 3.38	Average score: 3.21	
…have adequate computer skills.	Average score: 3.24	Not rated.	
…know the basic principles of business and management.	Average score: 3.17	Average score: 3.16 More management based courses.	
…understand the theoretical principles involved in structural forces, electricity, soil mechanics, and environmental control.	Average score: 3.41	Average score: 2.95	
…understand how building systems affect building design.	Average score: 3.30	Average score: 3.11	
…be able to read and interpret working drawings.	Average score: 2.99 More instruction in reading plans and blueprints.	Average score: 2.95	Study the Division 1 contract documents. Keep up with documentation.
…be familiar with basic plane surveying concepts and techniques.	Average score: 3.29	Average score: 3.00	
…be familiar with construction methods and techniques.	Average score: 3.29 More hands-on experience.	Average score: 3.16 Visit actual construction sites and talk to people in the field. More hands-on experience.	Student needs more experience in the field.
…have skills in estimating and preparing bids.	Average score: 2.86 More estimating classes.	Average score: 2.89 More estimating classes: One should focus on residential, and one should focus on commercial.	
…have planning and scheduling skills.	Average score: 3.11	Average score: 2.89	Student did not have much experience with the construction progress and productivity curves which are heavily used in our industry.
…be familiar with construction accounting and financial practices.	Average score: 2.73	Average score: 2.37 More instruction in budgeting and management.	
…be familiar with the most	Average score: 3.00	Average score: 2.95	Student's knowledge on

important issues and instruments of construction law.			contracts limited his decision making.
…be able to establish a safety program.	Average score: 3.21	Average score: 3.21	
…be familiar with administrative systems and procedures.	Average score: 3.02	Average score: 3.32	
…be able to develop a quality control plan.	Average score: 2.91	Not rated.	

4. Describe program strengths, weaknesses, and opportunities identified in the quality assessment program described above.

a) Program Strengths

(1) Quality of the faculty

(2) Guest speakers

(3) Internship

(4) Wide range of courses

b) Program Weaknesses (based on requests by students and graduates)

(1) More hands-on experience

Students consistently request more hands-on experience; however, this may be a misreading of the proper role typically provided by institutions of higher learning. Universities are not trade schools. However, laboratories do provide hands-on experience in materials and electrical courses. Moreover, field trips are scheduled on a regular basis.

(2) More instruction in reading working drawings

The CM Program added another course in reading working drawings five years ago. This is the prerequisite for the estimating course. Using a real project with working drawings was incorporated into CNST 450 in the spring of 2008.

(3) More estimating classes

Faculty decided it would be impractical to add another estimating course and still keep the total hours in the Program down and meet all of the ACCE requirements.

(4) More instruction in budgeting and management

Faculty decided that CNST 450, Construction Management, would be an appropriate venue for this. In the fall of 2008, a new textbook will be used in this course that provides specific, real-world examples in project management and budgeting. (*Construction Project Management* by Sears, Sears, & Clough).

(5) More experience in writing and speaking

ENG 305T is supposed to address writing professional documents. More opportunities for professional writing will be incorporated into CNST 306. Public speaking and presentations can be incorporated into CNST 201, 414, and 450 in fall of 2008.

c) Program Opportunities

(1) Provide more instruction in Building Information Modeling (BIM)

The CM Program hired Richard Baker who will begin in fall 2008. Dr. Baker had extensive experience with BIM when he worked for Turner.

In the fall of 2008, more emphasis will be placed on conflict detection of building systems by using 3D models in CNST 213, Environmental and Mechanical Systems in Buildings.

(2) Provide more instruction in sustainable issues such as LEED

Ellingson, Reposa, and Kim plan on becoming LEED certified by spring 2009.

Beginning in the fall of 2008, a new textbook will be required in CNST 213 that emphasizes sustainability (*Being Sustainable: Building System Performance* by Dennis Fukai).

5. *State specific plans, including schedule, for overcoming identified weaknesses and incorporating identified opportunities into the program.*

Please see dates and comments listed above.

B. PROGRAM CHANGES

1. *Describe the changes(s) in goals and outcomes of the construction education program as a result of the program's quality assessment plan.*

a) In the fall of 2007, forms were filed with the Office of Academic Affairs to reduce to reduce the total number of hours required by the Program. This plan was approved in spring 2008. The total number of hours required for a Construction Management degree is now 124 (minimum required by the University). This now allows for one 3-hour elective.

b) Program objectives were revised to more closely match ACCE content requirements; measurable outcomes were revised to improve Program weaknesses.

c) A Construction Minor was created in the fall of 2007.

d) Two new senior-level faculty were hired in fall 2007; one more will begin teaching duties in fall 2008. Dr. Reposa has specific skills in estimating; Dr. Kim has skills in statics, strength of materials, and information technology; Dr. Baker has skills in leadership, BIM, and information technology.

e) An annual job fair was begun in 2006.

f) In 2006, MCT 450, Construction Management, was restructured to resemble a capstone course.

g) TMGT 429, Workplace Law, was approved as a gen. ed. Capstone course. This can be taken online in the summer by construction students.

h) CNST 306 will place more emphasis on construction science and less on architectural design. (New textbook).

i) Began using Autodesk Revit in design courses, which is intended to make students more aware of the advantages offered by BIM.

2. State specific plans for implementation of program changes emanating from the modifications to goals and outcomes described above.

a) In spring 2009, MCT 450, Construction Management, will be submitted to the University for approval as a general education capstone course. If approved, this will eliminate the requirement to take a general education capstone course.

C. Actions to Address prior Cited Weaknesses

1. State actions taken to address program weaknesses cited in the previous visiting team report.

The ACCE visiting team report dated September 21-24, 2002, cited the following weaknesses:

a) The Mathematics and Science curriculum category is one credit hour short of ACCE requirements. (See discussion in Section III, B.5. herein, and ACCE Form 103, Section III, paragraph D.2.)

MCT 213, Environmental and Mechanical Systems for Buildings, now has 15 instructional hours in building science. These hours cover heat loss and heat gain calculations, psychrometrics, and moisture control. All of these topics are analytic. 15 instructional hours equals one credit hour. The physics and chemistry requirements total 8 credit hours. MATH 241, Statistics, is 3 credit hours. MCT 295, Introduction to Computer Applications, is 3 credit hours. The previous instruction totals 18 credit hours, which is the required amount. (MATH 123, Analytic Geometry and Linear Algebra for Engineers, is not included because the Program intends to eliminate this requirement.)

b) The Construction curriculum category is deficient in several required topics. (See discussion in Section III, B.6. herein, and ACCE Form 103, Section III, paragraph B. 5.)

The topical content, Construction law: National and Local Labor Law, is now being taught in BUS 263, Legal Environment and Business, or in IMT 429, Workplace Law and the Industrial Supervisor.

The following ACCE categories are now taught in MCT 450, Construction Management and ECON 100, Basic Economics:

(1) Capital equipment, depreciation, and expensing (5.35)

(2) Forecasting costs, cash flow requirements (5.36)

(3) Payment processes and time value of money (5.37)

c) There is a faculty shortage. (See discussion in Section IV, paragraph A.6. herein, and ACCE Form 103, Section IV, paragraph A., "The size of the construction faculty should be commensurate with the number of courses offered, the number of students enrolled, and the other responsibilities of the faculty.")

The administration has been very supportive of the Construction Management Program. The total number of construction faculty has been increased from four to five full-time positions.

d) The Outcomes Assessment Program is very weak. (See discussion in Section IX, paragraph C. herein, and ACCE Form 103, Section IX.)

The outcomes assessment program was revised and strengthened for the Third year Progress Report submitted to ACCE in 2006. In a letter written by Mark Benjamin,

President of the ACCE to Dr. Lloyd W. Benjamin, President of Indiana State University dated March 2, 2006, it was stated that "Actions taken by the institution on correction or elimination of weaknesses and concerns cited in the 2002 Visiting Team Report were approved with reservations." Outcomes assessment was not mentioned in the reservations.

The ACCE communicated the following reservations after the Third year Progress Report:

e) The Board does not agree that the ACCE standard of program leadership is met by delegation.

Program leadership is provided by senior faculty.

f) The Board has serious reservations on the overall effectiveness of instituting voluntary student advising to relieve faculty work loads.

It is most likely that the ACCE misinterpreted our reply in the Third year Progress Report about this concern. There is no "voluntary student advising" at ISU. The University did make a change that allows juniors and seniors to register online without a PIN (Personal Identification Number). We would like to emphasize that ISU makes a distinction between advising and course scheduling. Course scheduling is limited to selecting courses to take in the next semester. Advising includes career choices, curricular options, professional development, and advice of a more personal nature. Construction faculty have not delegated advising responsibilities in any way. Beginning in the fall of 2007, the Associate Dean's office assumed the responsibility of centralized scheduling; faculty will continue to provide student advising.

D. PUBLIC ACCOUNTABILITY

1. Indicate how the institution publishes the following material:

a) Objectives of the program

The mission statement, goals, and objectives of the CM Program have not been "published" in a traditional manner. However, the program has solicited comments from the Construction Advisory Board, and distributes this material to anyone who is interested.

b) Admission requirements

The admission requirements for the CM program are identical to those of ISU. The ISU admission requirements are published in the Undergraduate Catalogue and on the University Web site.

c) Program assessment measures employed and the information obtained through these assessment measures

The same statement made about objectives of the program applies. This information is available to anyone who might be interested. Of course, it is made available to the ACCE.

d) Student achievement

Indiana State University and the College of Technology (COT) publish student achievement in the following media:

(1) Commencement ceremony booklet, which lists all graduates and any honors they may have earned.

(2) COT Dean's List, published once each semester.

(3) Students' hometown newspapers, information sent on a routine basis.

(4) Inside Indiana Business, reported on a routine basis.

(5) COT Newsletters, published two or three times each year.

(6) COT Honor Day Brochure, published for the Honor Day ceremony each spring.

(7) COT Web site, updated on a routine basis.

e) The rate and types of employment of graduates

All graduates have been able to find employment in the construction industry. The Technology Management Department keeps a file of graduate contact information. Contact information is gathered during the Senior Seminar and on an informal basis.

f) Data supporting the qualitative claims made by the program

Outcomes assessment decisions and implementation are shared with the Construction Advisory Board. Members of the Board are solicited for comments and suggestions.

Assessment activities are also reviewed by the ISU Assessment Coordinator.

E. PROGRAM QUALITY

1. Define the academic quality assessment plan and how it relates to the program mission statement, goals, and measurable objectives.

The mission statement, goals, objectives, and outcomes are listed under heading I-C.

2. Identify the quality indicators used by the program.

a) Senior Survey

b) Employer Survey

c) Capstone Project

d) Alumni Survey