

American Council for Construction Education

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Dr. James L. Gaudino, President Central Washington University 400 East University Way Ellensburg, WA 98926-7501

Dear Dr. Gaudino,

I am writing on behalf of the American Council for Construction Education (ACCE) Team which visited your campus on March 7-10, 2015, and examined the Construction Management Program as part of the reaccreditation process. Attached please find the Visiting Team Report. I am also sending a copy of the report to Dr. Warren Plugge.

The Visiting Team Report presents the observations and findings of the Team with regard to the Construction Management Program. You will note that the Report concludes with the "Strengths, Weaknesses, Concerns and Undeveloped Potentials" which the Visiting Team identified with respect to the Standards. These items are essentially the same as those reported to you and others from the University during the Team exit interview.

As you know, our sending the Report to you represents one step in the reaccreditation process. Will you and others at the University please review the Report for factual accuracy? ACCE is <u>NOT</u> asking for a response to the stated Weaknesses and Concerns; responses and actions are appropriate content within the required Progress Reports. If we are to maintain the schedule for review, I ask that you return the Report, with any comments you may have, to me by May 12, 2015.

After the appropriate persons have examined the Report and you have returned your comments to me, I will send the final Report, including your comments, to the ACCE President and the Accreditation Committee Chair for further processing and consideration.



AGC EDUCATION AND RESEARCH















April 28, 2015 Dr. James L. Gaudino, President Central Washington University Page 2

The Visiting Team found all the people at Central Washington University – administrators, faculty, staff, students, alumni, and industry practitioners – to be courteous, helpful, and most gracious in every way. Thank you for the hospitality shown to our Team and for all your assistance while they were on your campus.

Sincerely,

American Council for Construction Education

John F. Gaver, Board Chair

Cc: Dr. Marilyn Levine, Provost

Dr. Connie Lambert, Dean

Dr. Lad Holden, Chair

Dr. Warren Plugge, Coordinator

Dr. John Schaufelberger, Chair, ACCE Accreditation Committee

Professor Jim Carr, Visiting Team Chair

American Council for Construction Education Central Washington University Ellensburg, WA

Construction Management Program

March 7 to 10, 2015

Visiting Team

Professor Jim Carr, Chairman University of Arkansas at Little Rock Little Rock, AR

Ms Sharla Rabin, Member Seminole State College of Florida Heathrow, FL

Mr. Marty Garza, Member Bartlett Cocke General Contractors Houston, TX

Rich Wells, LEED GA, Industry Observer Absher Construction Puyallup, WA

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Visiting Team Report

Section I: Introduction

1. Size, brief history, type, and purpose of the institution.

Central Washington University is one of six state-supported institutions offering baccalaureate and graduate degrees. The University has its own governing board, the board of trustees, with eight members, seven of whom are appointed for six-year terms by Washington's governor with consent of the state Senate, and one student trustee, appointed annually. Central was established in 1890 as Washington State Normal School by the first legislature to fulfill the intent of the 1889 Enabling Act for Statehood. Mr. Benjamin Franklin Barge was the first principal of the school, which was founded to educate future elementary and junior high teachers. In 1891, doors opened for classes. Ellensburg Normal School became Central Washington College of Education in 1937, Central Washington State College in 1961 and Central Washington University in 1977. In the fall of 2011 Central Washington University launched its online campus to enable people to complete degrees online.

The main campus is located in Ellensburg, Washington and is approximately 380 acres in size. In addition there are three university centers located on the east side of the state in Yakima, Moses Lake and Wenatchee, and five on the west side, in Des Moines, Everett, Kent, Lynwood, Mount Vernon and Pierce County. As of fall 2013 there were 10,170.12 FTE undergraduate students and 446.10 graduate students for a total FTE of 10,616.22. The total head count as of fall 2013 was 12,343 full and part-time students. Central offers over 150 undergraduate major degree choices, in addition to numerous specializations options within the degrees. Currently there are over 694 faculty members at Central Washington University (CWU).

CWU's mission is to prepare students for responsible citizenship, responsible stewardship of the earth, and enlightened and productive lives. Faculty, staff, students and alumni serve as an intellectual resource to assist central Washington, the region and the state in solving human and environmental problems.

2. Institution organization and location of the construction unit.

The administrative (academic) organization of CWU is composed of the President, Provost and Senior Vice President for Academic Affairs, Deans of the Colleges of Education and Professional Studies, Arts and Humanities, Sciences, and Business. The Construction Management (CM) program is housed in the Engineering Technologies, Safety and Construction (ETSC) Department which administratively falls under the Dean of the College of Education and Professional Studies. The change to ETSC from Industrial Engineering and Technology (IET) Department coincided with the addition to and renovation of Hogue Hall

3. Size, number of faculty members, brief history, and purpose of the construction unit.

The CM Program was conceived and originally developed in the mid-1970's as a response to an industry need that the IET Department could best satisfy. Since first appearing in the 1977-1979 university catalog, the program curriculum has undergone a number of major and minor revisions. The first major revision occurred in 1983/84 and the second in 1990. Minor revisions took place in 1993, 1994, 1997/98 and 2002. Another major change took place when the "Heavy, Civil and Highway Construction" option was approved and included in the 2005-2006 university catalog. This option gives students two curriculum choices; they may pursue "General" or "Heavy/Civil" construction as they work toward their degree.

Each fall quarter approximately 36 new students are allowed to enter the program at the junior level and during any academic year there are approximately 72 Construction Management Majors.

The primary mission for the CM Program is to provide the highest possible quality general construction education to undergraduate students who are preparing for careers in the construction industry. The secondary mission is to maintain ongoing contact with the construction industry and to provide support for this industry.

The Major Program Goals Are:

- Goal A: Improve the quality of instruction within the program
- Goal B: Provide support for the construction industry
- Goal C: Measurably improve the overall quality of the construction program
- Goal D: Support professional development for program faculty
- Goal E: Improve the newly-established heavy/civil construction option within the program

4. Accreditation history – first accredited and reaccredited.

Central Washington University's CM Program was initially accredited in 1992 and reaccredited in 1997, 2003 and 2009. The current report and site visitation is for the purpose of the re-accreditation of the program.

5. Degree title and credit hours required.

Bachelor of Science in Construction Management. 180 quarter hours required

6. Other degree programs administered by the construction unit.

None

7. Name of regional accrediting agency of the institution.

CWU is accredited by the Northwest Commission on Colleges and Universities (NWCCU).

8. Name and position of persons interviewed during the visit.

Institution Administration and Staff

James Gaudino, Ph.D., President

Marilyn Levine, Ph. D, Provost and Vice President for Academic and Student Life

Connie Lambert, Ph. D., Dean, College of Education and Professional Studies (CEPS)

Ethan Bergman, Ph. D., R.D.N., C.D., F.A.N.D., Associate Dean, CEPS

Michoan Spoelstra, Development Director, CEPS

Kristina Paquette, Secretary Supervisor, Career Service

Scott Carlton, Director of Academic Advising

Lad Holden, Chair, Department of Engineering Technologies, Safety and Construction

Jeff Stinson Ph. D., Chair, Department of Management James Avey, Ph. D., Associate Professor, Business and Management

Program Faculty and Staff

David Carns, P.E., Professor

Warren Plugge, Ph.D., Associate Professor

Michael Whelan Ph. D., Associate Professor

David Martin, Assistant Professor

Sathy Rajendran, PH. D., CSP, Assistant Professor, Safety and Health

Management

Michael Andler, MS, CRIS, Senior Lecturer, Safety and Health Management

Darryl Fuhram, Lecturer

Greg Lyman, Engineering Technician, ETSC

Matt Burvee, Support Technician, ETSC

Susan Van De Venter, Administrative Assistant, ETSC

Industry Advisory Board Members

Chad Webley, Vice Chair, Gary Merlino Construction Company Inc.

John Schmidt, Lydig Construction

David Keary, Associated General Contractors of Washington

Steve Houston, Skanska USA Building Inc.

Edward J Barry, Washington State Department of Transportation, Retired

Chris Long, Fisher and Sons

Students

Michael Norman

Joel Green

Josh Knapp

Tom Grange

Caireb Romos

Sean Holt

Kyle West

Mitchell Reiman

Dalton Thomas

Tommy Rollins

Jon Daasho

Mike Estes

Jacob Schweb

Jaun Hernandez

Shelby Williams

Cale Snider

Brian Merris

A 1 0 1 1

Andy Gunkel

Steven Hamilton

Anthony Scarsella

Kindra Scobba

Ryan Romano

Andrew Snowdon Brian Cordell Hoa Pham Sarah DeKoning Jordan Burnett Adeleke Mofolornso Caleb Phillips
Matt Offe
Cody Hookland
Spenser Anderson
Michael Day
Nicholas Becker

Section II: Organization and Administration

A. Institution

1. The organizational structure of the institution provides a basis for establishing authority and responsibility, utilizing resources and achieving goals within the construction education unit. The institution administration also has a positive attitude and support for the construction education unit.

The organization of the University provides a chain of command from the President, to the Provost, to the Dean of the College of Education and Professional Studies, to the Chair of the Engineering Technologies, Safety and Construction (ETSC) Department, to the Construction Management Program Coordinator. Each level appears to have the appropriate authority as well as responsibility to set goals and manage its own resources. The administration recognizes the accomplishments of the Construction Management Program and has a very positive attitude towards it. The Construction Management Program is recognized as one of the 12 "Signature Programs" on the CWU campus. This recognition provides additional support for the program.

In interviews with representatives of the institution's administration and supporting academic disciplines, the Visiting Team found a high level of knowledge about the program as well as a willingness to provide assistance. This was particularly notable coming from the President, who has also personally funded the Faculty Research Room in the Hogue Hall addition. The Visiting Team found the recognition as a "Signature Program" and the President's contribution to be Strengths of the program.

2. Institutional support of the administration of the construction education unit accords status within the institution comparable to that of other academic units of similar size and function with regard to finances, staffing, teaching loads, promotions in rank and salary, appointment to institution policy making committees, program priorities, and other academic affairs.

The Construction Management Program appears to have the status equivalent to that of other programs within the ETSC Department except for student/faculty ratios. Although teaching loads are comparable, the Construction Management faculty have heavier advising loads when compared to comparable programs within the Department.

3. The construction education program functions within the framework established for the institution and is consistent with the institutional mission and assessment procedures.

The CM Program functions well within the organizational structure of the institution. It is recognized and respected by everyone the Visiting Team interviewed. The mission, goals, objectives, and the assessment procedures of the Program are consistent with the institution.

B. Construction Unit

1. The construction education unit and/or program is headed by a qualified administrator who has sufficient authority, support, and time to accomplish the education program's goals and objectives.

Warren Plugge and David Carns share the duties of the Construction Management Program Coordinator. Both are well qualified to lead the CM Program and are supported by the administration and the program's faculty. Professor Carns was the Program Coordinator prior to last visit. He will retire in the near future and is working with Professor Plugge to assure a smooth transition of leadership.

2. The institution and the construction unit and/or program administrator insure that the total administrative work load is carefully controlled in relation to the total work load of the administrator.

The Program Coordinators are assigned 50% of their duties to administrative duties.

3. The administrator provides sufficient leadership and supervision to develop a strong academic program.

Professors Plugge and Carns provide sufficient leadership and supervision and through the programs assessment program and the Construction Advisory Council continue to maintain a strong academic program.

4. The organization structure of the construction education unit is designed to encourage communication, coordination, and interaction between administrative officers, faculty, students and other disciplines.

The program's offices are all located adjacent to each other on the third floor of Hogue Hall. This promotes strong interactions between the faculty, administration, and students.

5. The administrative structure is sufficiently flexible to make the functional changes necessary to attain program objectives.

The administrative structure allows for sufficient flexibility. This is evident by the success of the heavy civil option that has been added since the last reaccreditation.

6. The administrator encourages professional development of faculty, and administrative policy insures that opportunities for professional development are made available and used by the faculty.

Each of the CM Program's faculty have access to \$1,000 per year for professional development and may request additional funding.

7. The administrator and the faculty cooperate to develop a program of high quality and establish a structure to facilitate planning and evaluation for continuous improvement of the program.

The CM Program has an excellent quality improvement plan.

C. Budget

1. Within the institution, budget allocations are compatible with the size of the educational program with respect to students, faculty and staff.

The budget allocations are proportional to other programs in the ETSC Department.

2. Budget support is adequate to enable the program to achieve its stated purposes.

Funding is currently adequate.

3. Non-budgeted funds are used to supplement institution funds allocated by the administration rather than to replace those funds.

Non-budgeted funds, such as the Construction Management Advisory Council Foundation account, have been used to expand labs and to provide a variety of extra services such as student competitions that benefit the student's educational experience. The Program Coordinator and CM faculty administer this account.

D. General comments of the Visiting Team, if any, not included in the preceding discussion in this section of the report.

None

Section III: Curriculum

A. Program Description

1. The professional program offered by the construction education unit is consistent with the philosophy and the purposes of the institution and the goals as established.

The Construction Management Program is consistent with the philosophy and the purposes of the institution and the goals as established.

2. The curricular goals relate to the needs of society and the construction profession.

The CM Program's goals relate to the needs of society and the construction profession.

3. Recognizing the autonomy of educational institutions in the matter of curriculum development and the levels and designations of the degrees awarded, it is preferred that the word "Construction" be included in the name of the degree awarded.

The University awards a Bachelor of Science in Construction Management degree.

B. Curriculum

1. The construction education program develops its own program goals, objectives and particular emphasis, and prescribes the number of courses for graduation, sequencing of study, course numbers, and titles.

The Visiting Team found this statement to be true. The sequence of study, course numbers, and titles are logical and in the appropriate order.

2. The total curriculum supports the goals and objectives of the construction education program, provides balanced content, and meets ACCE's minimum requirements for credit hours in the categories of General Education, Mathematics and Science, Construction Sciences, Business and Management, Construction, and Other requirements.

The curriculum is designed to accommodate continually expanding requirements of the profession, advancements in knowledge, and the contributions of related disciplines. The Construction Management Program strives to provide curriculum offerings beyond the minimum requirements of the ACCE Standards and Criteria for Accreditation.

The curriculum category credit count is as follows:

Curricula Category	ACCE Minimum	Program	Team	
General Education	22	32	32	
Math & Science	22	25	25	
Business &	0.7	27 – 29	27 – 29	
Management	27			
Construction Science*	30	37	37	
Construction*	30	38 - 39	38 - 39	
Other	34	20	20	
Total*	180	180	180 - 183	

^{*}Minimum combined total Construction Science and Construction 50 Semester hours

The combined Construction / Construction Science curriculum category meets or exceeds the required 75 credit hours.

3. General Education, Mathematics and Science, and Fundamental Business and Management curriculum provide the student with diverse exposure to disciplines outside of the construction unit.

The Program's curriculum in these areas meets or exceeds ACCE requirements.

4. The total curriculum meets all minimum requirements for core subject matter at the minimum required level of academic credit.

The curriculum meets all minimum requirements for core subject matter at the minimum required level of academic credit.

5. The total curriculum contains all required curriculum topical content.

The Visiting Team verified that all the required curriculum topical content is contained in the curriculum.

6. Each course demonstrates alignment of specific and measurable learning outcomes to required topical content and program learning outcomes.

The program has developed specific and measureable learning outcomes to meet the program's learning objectives. These outcomes are used each semester in the program's assessment evaluation.

C. General comments of the Visiting Team, if any, not included in the preceding discussion in this section of the report.

The CM Program's students take SHM Construction Safety taught by faculty in the Safety and Health Management (SHM) Program. Only one of the current faculty is certified to issue OSHA 10 and 30 hour cards. Although this is not an ACCE requirement, this opportunity is an Undeveloped Potential of the program.

Section IV: Faculty and Staff

A. Qualifications

1. The faculty members possess appropriate academic qualifications, professional experience, and pursue scholarly and creative activities essential to the successful conduct of an associate/a baccalaureate level academic program of construction.

The CM Program's faculty have excellent academic and professional experience. Two of the tenured hold Ph.D.'s and the others have M.S. degrees. The non-tenured/tenure track position is held by an individual with a M.S. degree. All of the faculty have professional experience in the industry.

2. The institution provides the faculty with rank, status, salary, and benefits commensurate with their educational background and professional experience.

The CM Program's faculty are provided adequate compensation based on their rank. Faculty members in fulltime tenure-track positions are subject to provisions contained in several documents:

- 1. Collective Bargaining Agreement Between Central Washington University And United Faculty of Central (October 2, 2009 through August 31, 2013)
- 2. College of Education and Professional Studies: Faculty Performance Standards for Reappointment, Tenure, Promotion, Post Tenure Review (June 18, 2014)
- 3. ETSC Faculty Handbook (May 23, 2014)
- 3. The educational preparation of each faculty member includes study in the areas for which he/she has teaching responsibility and includes adequate background in the supporting disciplines from which his/her area of specialty draws major concepts and principles.

All of the CM Program's faculty have appropriate educational experiences and are very qualified. The faculty are all very accessible by the students. The Visiting Team found this to be a Strength of the program.

4. Evaluation of faculty competence recognizes appropriate professional experience as being equally as important as formal educational background and that continuing professional growth of the faculty is a prerequisite to effective teaching.

Faculty evaluations of the competencies are based on the academic and professional experiences.

5. The faculty actively participate in professional organizations and community services, and in interpreting construction education to other professions and to the general public.

The faculty are involved with professional organizations and community service projects.

6. The size of the construction faculty is commensurate with the number of courses offered, the number of students enrolled, and the other responsibilities of the faculty and is appropriate to the type of instruction and comparable to that of the faculty of other comparable academic programs of the institution.

The size of the faculty allows each course to be offered once per year. With the program only allowing 36 students into the program each year, the size of the classes is comparable to other academic programs.

B. Faculty Workload

Faculty workload assignment takes into consideration the number of lecture hours, number of laboratory hours, number of separate preparations, class size, availability of teaching assistants, advising activities, administrative activities, committee assignments, extension or continuing education commitments, and research activities.

The collective bargaining agreement limits the faculty workload and provides consideration for contact hours, advising, committee assignments, and scholarly activity.

C. Administrative and Technical Staff Support

Administrative and technical staff support are adequate to sustain fulfillment of the construction program's mission and are consistent with the level of support enjoyed by other programs within the institution.

The program is supported by two technicians and one administrative assistant assigned to the Engineering Technologies, Safety and Construction Department. None of these individuals are assigned to the program. The Visiting Team considered this to be a Concern directly related to Document 103, Section 4.3.

D. Employment Policies

Faculty compensation is competitive with comparable positions within the institution to insure that quality faculty and high morale exist.

The faculty indicated compensation was fair and adequate in consideration of rank, position and location.

E. Professional Development

Consulting work is encouraged, provided such activities do not conflict with normal assigned duties and responsibilities of the faculty member.

The University recognizes this participation and counts it under the service category of each faculty member's Professional Record that is used in determine tenure and promotions.

F. Faculty Evaluation

A clearly defined program of annual faculty evaluation is in place and may include student, peer, and/or administrator evaluations. Faculty evaluation includes both full-time and part-time faculty.

The CM Program uses the University's evaluation policies that are clearly defined.

G. General comments of the Visiting Team, if any, not included in the preceding discussion in this section of the report.

None

Section V: Students

A. Admissions and Enrollment

 Qualifications of students admitted to the construction education program are comparable with those of students in other programs within the institution and appropriate to the requirements for construction education.

Admission to the CM major is a two-step process whereby the interested student must first be accepted as a pre-major and subsequently, complete the application process for the major. The pre-major applicants complete a standardized and fairly basic application form. The major application process is more comprehensive and includes the submission of a completed checklist, completed application form, unofficial copies of transcripts, a specific and realistic academic plan, a current

resume, and a business letter that is addressed to the selection committee. The letter presents information about work experiences, academic goals and objectives, justification for the student's choice of the CM major, and time to completion of the degree. These requirements exceed those of a typical applicant to the University and are appropriate to the requirements for construction education. The University administration, the Construction Management Advisory Council, and the students agree that the Enrollment Management Plan should continue. The Visiting Team found the enrollment management plan to be a Strength of the program.

2. Admission policies, where applicable, are directed toward students with the ability and credentials for successful completion of the curriculum.

Because the program receives a significantly higher number of applications than it allows into the program each year, it is able to ensure a higher quality population of majors. The pre-major concept also helps to ensure that major courses are not filled with students from outside the program that might otherwise want to register for them. Students that have been accepted into the major appear to be highly motivated and grateful to be among a select group.

3. Recruitment and publicity for the construction program are comparable to other programs of the institution.

The CM Program self-elects to cap enrollment to ensure quality in the program. Each year the program allows 36 new students to enter the program. Most recently, this meant that almost twice that number were seeking acceptance into the program. Nonetheless, promotional literature/posters were evident in the Hogue Building.

B. Academic Progress

1. An organized system of advising is available to all students in the construction education program so that their needs, interests, and abilities are considered in preparing and implementing a plan of study.

Both pre-majors and majors are assigned CM faculty advisors according to the first letter of their last name. This provides for a fairly balanced advising load among the CM faculty.

In addition, the Academic Advisement Center is on campus and its advisors are available for advisement by appointment (or walk- in). This Center recently reorganized to dedicate specific advisors to Departments/Programs. As a result, the advisor assigned to the Department's programs is familiar with the CM Program's requirements and of particular help to freshmen and sophomore students in developing an academic plan.

The Center's professional advisors also teach University 101, Academic Advising Seminar, to incoming students.

Academic advisors in area community colleges, in the opinions of many students, were not informed about the program and were not very helpful to transfer students.

2. A record system exists that keeps both b student and advisor informed regarding the students' progress toward completion of degree requirements.

Hard copy files are housed in each CM faculty member's office for his/her advisees. Each faculty member is responsible for maintaining their assigned students' advising files. Students are assigned an advisor according to the first letter of their last name and stay with the advisor for their entire time in the program. Students in the major must get approval each quarter, with accompanying registration code, from their advisor before the system will allow them to register for their courses.

C. Extracurricular Activities

Students are encouraged to participate in activities in addition to their academic studies. Such activities include involvement with industry-based professional and other organizations.

Several student organizations exist in the program. The majority of students participate in the Association of Construction Managers (ACM) although student chapters of SLC, NAHB, and MCA also exist in the program. Student service projects include participating in Habitat for Humanity projects, hosting a "Welcome Back" barbecue, and mentoring underclassmen (a new endeavor). Almost all of the students had participated in ASC's Reno Competition.

D. Graduates

There is an established plan for communication with alumni and periodic follow up of graduates.

Alumni and industry surveys are sent out and collected on an ongoing and regular basis. These surveys provide assessment data that supports the Quality Assurance Plan of the program. In addition, alumni are very active in the Industry Advisory Council and the program, including frequent information sessions, guest lectures, jobsite tours, and internships.

E. General comments of the Visiting Team, if any, not included in the preceding discussion in this section of the report.

The level of student engagement and enthusiasm for the program was evident. Because enrollment into the program is limited, students appeared to share a strong sense of pride and commitment to the program.

From the Visiting Team's observations while on campus, the CM Program's diversity of students in very limited. Expanding the diversity of the student population is an Undeveloped Potential of the program.

Section VI: Facilities and Services

A. Physical Facilities

1. Physical facilities are well maintained and organized to accommodate academic activities such as lectures, discussions, seminars, conferences, laboratory work, and research.

The Visiting Team toured the facilities utilized by the program for all academic activities and found them to be organized and well maintained. The program shares the new Hogue Technology Building, completed in 2012, with all programs in the Engineering Technology, Safety and Construction Department. Although classrooms are not dedicated to the Construction Management Program, they are shared primarily with the ETSC Department and only released to other departments when not scheduled or blocked by an ETSC program. All classrooms and labs are located within Hogue Technology Building and all are within a one-two minute walking distance between classes and offices. Hogue Hall was certified LEED Gold on March 27, 2014.

2. There are laboratory facilities for the teaching of construction principles and practices (such as estimating and scheduling), and facilities for office oriented activities with adequate storage space for multiple copies of plans and specifications, and facilities for field-oriented activities.

The Visiting Team toured all laboratory facilities for the teaching of construction principles and practices and for office oriented activities and found them to be adequate. Adequate space is provided for multiple copies of plans and specifications and specialized technology is available for projecting drawings. All labs were well organized and maintained. The program has access to two computer labs in the Hogue Technology Building, one is a 20 computer lab/classroom facility and the other is a 27 station lab facility. Occasionally both labs are used as a classroom and the students have limited access to computers with industry specific software. The Visiting Team found this to be a Concern for the program.

B. Information and Research Gathering System

1. The program has adequate access to holdings related to the general and professional components in the various fields of construction, design, and management.

The CM Program is supported by the CWU Brooks Library located one block west of the Hogue Technology Building. Students have adequate access to holdings related to the general and professional components in the fields of construction, design, and management. Although the CM Program does not receive dedicated services from the Library, the ETSC Department is allotted a portion of the Library's annual budget to designate the purchase of new books and periodicals.

2. There is evidence of both adequacy and use in the selection of library or other materials and responsibility for their effective use by students.

The Visiting Team found sufficient evidence of both adequacy and use in the selection of library materials and responsibility for their effective use.

C. Other Services

Appropriate services on campus are effectively used, including the computer center, audiovisual, placement, student services, and financial aids.

Services on campus, including the computing centers, student services and the career center are adequately staffed and effectively utilized by the students. The career services department works closely with the CM Program and praised the program for their efforts in working with industry to place the CM graduates.

D. General comments of the Visiting Team, if any, not included in the preceding discussion in this section of the report.

During the fall 2014 quarter, 60 companies participated in the Career Fair to interact with the 72 students. The Visiting Team believes this is an indicator that the CM Program's graduates are desired by the industry. The Visiting Team found this to be a Strength of the program.

Section VII: Relations with Industry

A. Support from Industry

1. An industrial advisory committee, consisting of representatives from the construction industry, is actively involved in an advisory role for the construction program.

The Construction Management Advisory Council was expanded in 2013 to support the Construction Management Program and provide financial support to the program. The CMAC currently has 16 industry members including government and association members (WDOT, AGC, MCA) and 5 CWU staff/faculty members. The Council is involved in the development and review of program curriculum and provides suggestions for improvement, many of which have been implemented by the program. They also provide financial support through voluntary contributions which have totaled \$625,504 over the last 5 years.

The CM Program also utilizes a University Development Officer, Michoen Spoelstra, to work closely with the CMAC to develop support for the program. Ms. Spoelstra is a strong supporter of the CM Program and helps to develop relationships with

potential industry supporters and provides assistance to industry and program staff as needed. The Visiting Team found the CMAC to be a Strength of the program.

2. The committee meets at least annually for the purpose of advising and assisting the development and enhancement of the program.

The CMAC meets 2 times per year, in the fall and the spring. The purpose of these meetings is to advise and assist in the development and enhancement of the CM Program. Additional meetings are held to plan special CM events or meet specific needs of the CM Program.

B. Support for Industry

The construction program has an active program of continuing education and research directly applicable to and in support of the construction industry.

The Construction Management Program has an active program of continuing education and research directly applicable to and in support of the construction industry. Faculty are involved in research and consulting relevant to the construction industry and are consistently involved with the CMAC.

C. Student-Industry Relations

There is well-documented evidence of industry involvement such as field trips and speakers for student clubs.

The construction industry is fully engaged with the faculty and students by providing guest speakers for class lectures, field trips to local construction project sites, as well as coaching and financial support as needed.

D. General comments of the Visiting Team, if any, not included in the preceding discussion in this section of the report.

The CM Program's CMAC is limited to 16 members. This Visiting Team believes the potential exists for increased membership in the CMAC. This idea is based on the fact that 60 companies participated in the Fall Career Fair. The Visiting Team found this to be an Undeveloped Potential for the program.

Section VIII: Relations with the General Public

A. The program manifests accountable behavior by providing the information listed in the following table in a manner that it is current and accessible to the general public. (Explain any findings of lack of full compliance within the table.)

Public Information Requirements	Compliance Status
Objectives of the Program	In compliance
Program Admission Requirements	In compliance
Program Quality Improvement Plan	In compliance
Program Assessment Measures	In compliance
Information Obtained from	In compliance
Assessment Measures	
Actions Taken as Result of	In compliance
Assessment Data Collected	
Student Achievement	In compliance
Rate and Types of Employment of	In compliance
Graduates	
Data to Support Qualitative Claims made by the Program	In compliance

B. General comments of the Visiting Team, if any, not included in the preceding discussion in this section of the report.

None

Section IX: Program Quality and Outcome Assessment

A. The construction educational unit has a Quality Improvement Plan (QIP) that is used for continuous improvement of the degree program. The plan includes all of the elements listed in the following table. (Explain any findings of lack of full compliance within the table.)

Educational Unit	Compliance Status
1) Strategic Plan for the educational unit that includes	
Systematic and sustained effort to enable the degree program to achieve its mission	In compliance
Assessment of available resources and external factors that may influence the degree program	In compliance
Input from degree program constituencies when plan is updated	In compliance

2) Assessment Plan for degree	In compliance
program	
3) Assessment Implementation Plan	In compliance
for degree program	

B. The degree program has an Assessment Plan that is used for continuous improvement of the degree program. The plan includes all of the elements listed in the following table. (Explain any findings of lack of full compliance within the table.)

Degree Program	Compliance Status		
Mission statement	In compliance		
Degree program objectives	In compliance		
Program learning outcomes	In compliance		
Performance criteria	In compliance		
Evaluation methodology	In compliance		

C. The degree program has an Assessment Implementation Plan that is used for continuous improvement of the degree program. The plan includes all of the elements listed in the following table. (Explain any findings of lack of full compliance within the table.)

Degree Program	Compliance Status
Documentation of the results of each assessment cycle	In compliance
Documentation of the analysis of the data collected in each assessment cycle	In compliance
Documentation of any program revisions made at the end of each assessment cycle.	In compliance

D. General comments of the Visiting Team, if any, not included in the preceding discussion in this section of the report.

None

Section X: Review of Last Visiting Team's Weaknesses and Concerns

- A. List last Visiting Team's noted Weaknesses and actions taken by the institution.
 - 1. ADMG 385, Business Communication and Report Writing is classified as a "General Education, written communication" course rather than a "Business and Management" course. This leaves the curriculum 5 quarter credits short in the "Business and Management" category (Document 103, Section III, 3.3.2). This issue was discussed in Section III.B.4 of the 2009 Visiting Team Report.

This Weakness was eliminated.

- B. List last Visiting Team's noted Concerns and actions taken by the institution.
 - 1. The student faculty ration for CM is the highest in the Department, and significantly higher than that for EET and MET. It is not clear whether the workload model adequately addresses the implications with respect to advising requirements. All advising of CM students is by CM faculty, with no staff resources available. As faculty workloads increases, it becomes more difficult to maintain quality. Increased student enrollment or additional faculty duties without commensurate investment in resources could lead to a Weakness with respect to Document 103. Section IV.4.2.

This Concern has been eliminated.

2. The introduction of the Heavy/Civil option, which has been very popular with students and Industry, places a heavy load on a recently hired, untenured faculty member. It is not clear that the workload model recognizes this additional effort of stating and refining this option. If the workload becomes so great that contributions in the area of scholarship are not possible, a good faculty member could be lost in the promotion and tenure process, resulting in a Weakness with respect to Document 103, Section W.4.1 and/or Section W.4.2.

This Concern has been eliminated. The faculty member this describes has been tenured and promoted.

3. The existing 20-work-station lab is the only lab on campus with all software used by CM students. When the lab is used for course instruction, it is not available for students working on their homework. As a result there is a limitation with respect to student access. Although the current situation is workable, any increase in IET enrollment or any deterioration of facilities could lead to a "facilities" Weakness with respect to Document 103, Section VI.6.1.

This Concern still exists. The program has access to two computer labs in the Hogue Building addition that was completed in the fall of 2011. One is a 20 computer lab/classroom facility and the other is a 27 station lab facility. The concern is that occasionally both labs are used as a classroom and the students have limited access to computers with industry specific software. This could lead to a Weakness based on Document 103, Section VI.6.1.

4. Attendance for the current Industry Advisory Council meetings has been inconsistent. Since it appears that geography and the transient nature of construction projects are legitimate factors, the Council should look to a different organizational approach or great use of available technology to complete its mission as the primary conduit for industry-program communication and support. Industry supporters are making substantial voluntary contributions of time, effort, and money. If feelings of frustration or underutilization of precious time were to develop, strong industry support could be threatened, potentially leading to a Weakness with respect to Document 103, Section VII.7.1.

This Concern has been eliminated.

Section XI: Strengths, Weaknesses, Concerns, and Undeveloped Potentials

A. List Strengths.

- 1. The Industry Advisory Council is very actively supporting the program in the classroom, employing graduates, providing internship opportunities, and with financial support.
- 2. The program is recognized as one of the 12 "Signature Programs" on the CWU campus.
- 3. The program enjoys strong support from the administration. This is evidenced by the fact that the current CWU President funded the Faculty Research Laboratory in the Hogue Hall Addition.
- 4. Enrollment management policies that limit the number of students entering the program to students with a strong academic background and advising procedures that assure the students efficiently progress through the program is a strength of the program.
- 5. The faculty are very qualified and very accessible to the students.
- 6. The program's students are desired by the industry. This is evident since sixty firms participated in the Fall Career Fair to interact with the 72 students in the program. Additionally, the program enjoys an almost 100% placement rate of their graduates in industry.
- B. List Weaknesses. (Include and identify as such any Weakness(es) remaining from previous Visiting Team reports, as discussed in Section X.

Also, include and identify as such any Concerns remaining from previous Visiting Team reports that have become Weaknesses, as discussed in Section X.)

Weaknesses of the program must be related to a lack of full and complete compliance with an ACCE standard or criteria as prescribed in Document 103, Standards and Criteria for Accreditation of Postsecondary Construction Education Degree Programs. Weaknesses may be based either on evidence of non-compliance with or lack of evidence of compliance with ACCE requirements. For each Weakness, specifically cite the appropriate ACCE standard or criteria that forms the basis for the Weakness.

For each Weakness listed, the reasons for citing a lack of full and complete compliance with the standard must be fully explained within the body of the report. Include in this Section a specific reference to the location of that explanation in the body of the report.

All Weaknesses listed in the report must have been discussed with the administration of the institution during the exit interview. Any Weakness not so discussed must be brought to the attention of the Program Administrator and his/her next higher administrative unit by the Visiting Team Chair prior to being included in the report.

No Weaknesses where discovered.

C. List Concerns. (Include and identify as such any Concern(s) remaining from previous Visiting Team reports, as discussed in Section X. Also, include and identify as such any Weaknesses remaining from previous Visiting Team reports that while corrected to some extent have now become Concerns, as discussed in Section X.)

Concerns may or may not be specifically related to Document 103. A Concern relates to circumstances, situations, or issues that either have or could in the future have an adverse impact on the construction program and/or could become a Weakness if not addressed. For each Concern, specifically cite as appropriate:

- a. Its adverse impact or potential adverse impact; and/or
- b. That part of Document 103 that forms the basis for the Concern; and/or
- c. State how the Concern could become a Weakness.

For each Concern listed, the basis for the concern must be fully explained within the body of the report. Include in this Section a specific reference to the location of that explanation in the body of the report.

1. Computer Lab Facilities. [See Section VI A 1 of this Report.] The program has access to two computer labs in the Hogue Building addition that was completed in the fall of 2011. One is a 20 computer lab/ classroom facility and the other is a 27 station lab facility. The concern is that occasionally both labs are used as a classroom and the

- students have limited access to computers with industry specific software. [See ACCE Document 103, Section VI.6.1.]
- 2. Technical Staff Support. [See Section IV C of this Report.] The program does not have any dedicated technical or administrative support. The Engineering Technologies, Safety and Construction Department is supported by two technicians and one administrative assistant but the workload these individuals currently has limits their ability to adequately service the program. [See ACCE Document 103, Section 4.3.]

D. List Undeveloped Potentials.

Undeveloped Potentials are those areas that in the opinion of the Visiting Team might be explored for the potential enhancement of the program.

- 1. There is ample opportunity for improving the diversity of the CM students.
- 2. Creating an opportunity for students to earn an OSHA 10 or 30 hour card.
- 3. The membership of Construction Management Advisory Council could be increased to expand their strong ties with the construction industry.