UNIVERSITY OF TEXAS ARLINGTON | DEPARTMENT OF CIVIL ENGINEERING

MEMORANDUM

TO: Dr. Beverly Black,
Chair of the Graduate Assembly

FROM: Dr. Ali Abolmaali
Interim Chair, Department of Civil Engineering

REFERENCE: Master of Construction Management Degree

DATE: November 12, 2012

CC: Dr. Mohammad Najafi

The Department of Civil Engineering fully supports the proposal by Dr. Najafi to establish a Master of Construction Degree at the Department of Civil Engineering. The Department of Civil Engineering, where the new program will be housed, will provide administrative support for this new degree. Additionally, I am happy to inform you that the Graduate Studies Committee (GSC) in their meeting of August 24, 2012, approved above proposal.

We look forward to the start of the new program in the Fall 2013, and thank you in advance for expediting the approval process.

DEPARTMENT OF CIVIL ENGINEERING
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UNIVERSITY OF TEXAS ARLINGTON | COLLEGE OF ENGINEERING

MEMORANDUM

TO: Dr. Beverly Black,
Chair of the Graduate Assembly

FROM: Dr. Jean-Pierre Bardet
Dean, College of Engineering

REFERENCE: Master of Construction Management Degree

DATE: November 12, 2012

CC: Dr. Ali Abolmaali and Dr. Mohammad Najafi

The College of Engineering fully supports the proposal by Dr. Najafi to establish a Master of Construction Degree at the Department of Civil Engineering. The College of Engineering and the Department of Civil Engineering, where the new program will be housed, will provide administrative support for this new degree. Additionally, the Deans of the following Schools and Colleges, where the electives will be taken, have provided their support:

- Architecture
- Business
- Urban and Public Affairs

I thank you in advance for your early review and approval of this important program.

Jean-Pierre Bardet
Dean, College of Engineering

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Proposal for Establishment of a

Master of Construction Management Degree

College of Engineering
Department of Civil Engineering
The University of Texas at Arlington

Construction Management

Advances in construction technologies, financing, and methods underscore the need for a sound and systematic management of construction projects. Organizational structures, business models, and the capability of implementing new technologies into practice necessitate advanced study in Construction Management. The proposed master's degree in Construction Management at The University of Texas at Arlington (UT Arlington) provides students interdisciplinary studies in commercial, residential, heavy/highway, and industrial applications to address a broad range of challenges facing the construction management field.

Needs for Master of Construction Management (MCM) Degree

The current program in the Department of Civil Engineering is designed mainly for applicants with an undergraduate degree in Civil Engineering. The existing program includes M.S. and M.E. degrees in Civil Engineering with focus in Construction Engineering and Management. The new proposed MCM is an interdisciplinary program focused on management of construction projects, with less emphasis in civil engineering. The new program will be interdisciplinary, with elective courses from Architecture, Business and Management. Students with different undergraduate disciplines (Architecture, Science, Business, Management, etc.) can enter the program with taking assigned leveling courses.

Method of Delivery: Available On-campus and Distance Learning

In addition to our traditional on-campus classroom environment, this program is available via distance delivery. This flexible option is ideal for engineering and construction professionals who choose to pursue an advanced degree while employed. The Distance Learning students will be able to watch lecture materials online via the "Echo" system already established at the College of Engineering. Additionally, Blackboard course management system will be used for test, class assignments and group discussions. The only courses that require laboratory work are CE 5379 (Construction Cost Estimating), and CE 5386 (Construction Planning and Scheduling). For these two courses, students are required to complete a number of laboratory exercises and complete a project. Since it is possible to provide students a limited time versions of Software used with these two courses, students can complete lab exercises without physically be present at UT Arlington Construction Laboratory from their home or office.

Degree Plan and Program Requirements

The degree completion requires:

- A minimum of 30 Credit Hours (10 courses). Some course combinations may add to more than 30 credit hours. Currently, the following universities in Texas provide similar degrees, with 30 credit hours course work only:

The University of Texas El Paso	Construction Management (MSCM)	30 Credit (non-thesis)
The University of Texas Austin	Construction Engineering & Project Management (Coursework only option)	30 Credit (non- thesis)

- A minimum cumulative grade point average (GPA) of 3.0 (A=4.0)
- The minimum time required for earning the degree is expected to be two full semesters + summer (one year), or three semesters of full-time enrollment (one and one half years). Part-time enrollment is permitted. International students must meet full-time registration requirements.
- All classes are taught late afternoons and evenings to accommodate working students.
- Up to six (6) transfer graduate credit hours (two courses) may be accepted from an accredited institution with the approval of the Program Director.
- A 3-credit hour (CE 5395) independent study course (project) may be taken in substitution of one of the electives.

- Core courses which will be offered each year include:

  - **CE 5344 Construction Methods - Field Operations** (3-0). Introduction to the methods, equipment, and management techniques used in construction industry. Topics include equipment operating characteristics, permits, job site safety, engineering economy and field management. Credit not granted for both CE 5344 and CE 4332. Prerequisites: consent of instructor or graduate standing.

  - **CE 5300 Construction Management** (3-0)*[1]. Project management principles, including budgets, cost codes, cost-to-complete and financial reports specific to the management of a construction company and project control. Types of construction contracts, contractual relationship between general contractor and owner, contractual relationship between general contractor and sub-contractors, legal issues in construction administration, insurance, and concepts in value engineering. Reading and evaluating specifications, CSI Master Format. Prerequisite: consent of instructor.

  - **CE 5379 Construction Cost Estimating (3-0).** Types of estimates, development of unit costs, quantities take-off, cost estimating using manual methods and computerized cost estimating, budgets and costs. Co-requisite: CE 5386.

* New Course

- **CE 5386 Construction Planning and Scheduling (3-0).** Construction productivity, planning and scheduling of operations, flow charts, linear programming, critical path method (CPM), program evaluation review techniques (PERT), precedence networks. Computer methods. Co-requisite: CE 5379.

- **CE 5387 Construction Productivity** (3-0). Evaluation of construction project management's effectiveness. An investigation of the advanced techniques required for improvement of construction projects including time, cost, quality management, preplanning, field evaluation techniques, time-lapse photography, safety, human factors, risk management, and communications. Prerequisite: CE 5379 and CE 5386.

- Construction Elective courses include:

  - **CE 5300 Building Information Modeling (BIM)** (3-0)*[2]. Integration of design and construction to ensure efficient management of information processes throughout the project life span, utilizing multidisciplinary virtual 4D computer simulation to deal with complex engineering challenges.

  - **CE 5300 Construction Sustainability** (3-0)*. Leadership in Energy and Environmental Design (LEED); green building strategies; carbon foot printing; calculating the embodied energy of building materials; cyclical processes in design and construction.

  - **CE 5300 Public Private Partnerships (P3)** (3-0)*. Principles and methodologies of public private partnerships (P3). Includes all phases of planning, designing, contracting, financing, implementing, and operating.

  - **CE 5388 Pipeline Construction and Trenchless Technology** (3-0). Pipeline & utility design, construction and renewal. Topics include pipeline infrastructure structural considerations, planning and construction considerations, pipe materials, and trenchless technologies.

  - **CE 5389 Infrastructure Asset Management and Sustainability** (3-0). Infrastructure inventory, inspection, and life-cycle-costs. Topics include deterioration parameters, asset management technologies, risk assessment, government regulations, and case studies.

  - **CE 5345. Infrastructure Evaluation, Maintenance and Rehabilitation** (3-0). This course is designed for engineers and managers involved in infrastructure development, sustainability, and replacement. Topics include inspection, evaluation, maintenance and rehabilitation alternatives for water distribution, waste and water collection, surface and subsurface drainage, pavements, bridges and culvers. Prerequisite: consent of instructor.

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* New Course

- **CE 5300 Construction Contract Acquisitions** (3-0)*. Fundamentals of acquiring the required goods and services necessary to fulfill the obligations of the construction contract. Also covers contracting for services required by/provided by the owner and designers respectively. Additional topics include best tactics and strategies when negotiating with owners, architects, engineers, contractors, subcontractors, authorities having jurisdiction, and other construction professionals.

- In addition to above electives, with prior approval of Program Director, students may choose to take courses from the following departments:
  - Architecture
  - Business
  - City and Regional Planning
  - Management

- Sample electives may include the following existing courses:

Prefix and Number	Prescribed Elective Courses	SCH
ACCT5301	Accounting Analysis I	3
ACCT5302	Accounting Analysis II	3
ACCT5322	Accounting for Management Planning and Control	3
ARCH5395	Sustainability for Everyone	3
ARCH5395	AUTOCAD	3
ARCH5395	BIM & Viz (Visualization)	3
ARCH5333	Construction – II	3
ARCH5326	Environmental Controls Systems	3
ARCH5362	Structural Systems for Buildings	3
FINA5311	Business Financial Management	3
FINA5330	Real Options	3
IE5301	Advanced Operations Research	3
IE5318	Applied Regression Analysis	3
IE6302	Facilities Planning and Design	3
MANA5312	Management	3
MANA5330	Negotiations & Conflict Management	3
REAE5311	Real Estate Analysis	3
REAE5315	Real Estate Trends & Issues	3
REAE5337	Real Property Law	3

Unconditional Admission Requirements

NOTE: Performance on the GRE will not be the sole criterion for admitting applicants or the primary criterion to deny admission to either the master's or Ph.D. program. In cases where GRE performance is relatively poor all other qualifications presented by the applicant will be carefully evaluated for evidence of potential for success.

A student must meet the following requirements for unconditional admission:

1. A Bachelor's Degree in Civil Engineering (Applicant with an appropriate Bachelor's Degree in another discipline is considered, subject to satisfactory completion of leveling courses).
2. An undergraduate GPA of 3.0 on a 4.0 scale, as calculated by the Graduate School, is typical of a successful applicant.
3. A Graduate Record Exam (GRE) Quantitative score of 700 (old score system) or 155 (new score system) or higher is typical of a successful applicant.
4. A Graduate Record Exam Verbal score of 390 (old score system) or 146 (new score system) or higher is typical of a successful applicant.
5. For applicants whose native language is not English, a minimum score of 558 on the written Test of English as a Foreign Language (TOEFL), 220 on the computer TOEFL, 83 on TOEFL iBT, 40 on the TSE-A, 50 on the SPEAK, 400 on Verbal GRE, 85 on METLAB (Michigan English Language Assessment Battery), or 7 on the IELTS (International English Language Testing System). (METLAB and IELTS are used only when other tests are not available in the applicant's country.)
6. Favorable letters of recommendation from people familiar with the applicant's academic work.

Probationary Admission

If applicants do not meet a majority of standards for unconditional admission outlined above, they may be considered for probationary admission after careful examination of their application materials. Probationary admission may require that the applicant receive a B or better in at least their first 9 hours of graduate coursework applicable to their degree being sought at UT Arlington, take additional English courses, and/or deficiency courses as required.

Provisional Admission

An applicant unable to supply all required documentation prior to the admission deadline, but whom otherwise appears to meet admission requirements may be granted provisional admission.

Deferred Admission

A deferred application decision may be granted when a file is incomplete or when a denied decision is not appropriate.

Denial of Admission

A candidate may be denied admission if they have less than satisfactory performance on a majority of the admission criteria described above.

Waiver of GRE Admission

A waiver of the GRE may be considered for a UT Arlington graduate who has completed an undergraduate degree within the past 3 years from normal undergraduate feeder program for CE degree. Students must complete the last 60 hours of study and in all undergraduate coursework completed at UT Arlington. The student must comply with all other requirements for admission to

the Graduate School, i.e., submitting application, paying fees, providing required transcripts, letters of reference, etc. The applicant's record will be assessed for evidence of strengths relevant to success in the Civil Engineering graduate program. Meeting the minimum GPA requirement shall not be the sole determinant or the primary criterion for granting a waiver.

Facilitated Admission of Outstanding UT Arlington Undergraduates

Facilitated Admission may be considered for a student who has graduated from UT Arlington no more than one academic year prior to proposed entrance to the graduate program. Students must complete the last 60 hours of study at UT Arlington. The student's UT Arlington GPA must equal or exceed 3.5 in the last 60 hours of undergraduate study and all undergraduate coursework completed at UT Arlington. The applicant's record will be assessed for evidence of strengths relevant to success in the Civil Engineering graduate program. Meeting the minimum GPA requirement shall not be the sole determinant or the primary criterion for granting facilitated admission.

Leveling Courses

For non-civil engineering majors, the following leveling courses are recommended. Additional courses may be required, dependent on specific student educational backgrounds and experience.

MATH 2326 or equivalent
MATH 3319 or equivalent
CE 2311 or equivalent
CE 2313 or equivalent
CE 3301 or equivalent
CE 3343 or equivalent

Job Market Needs

Construction Management (CM) is an interdisciplinary field between engineering and management. It focuses on the engineering & management of construction. This program is specifically oriented to emphasize the application aspects of construction. The U.S. Department of Labor predicts that employment of construction managers is expected to grow 17 percent from 2010 to 2020, about as fast as the average for all occupations. Also, the current median pay predicted for construction managers is $83,860 per year Just to gauge the potential market for construction managers, according to the North Central Texas Council of Governments[3], in the DFW Metroplex, by 2040, we need:

- 1,100 new primary and secondary schools
- 1 million new homes
- 44 new hospitals
- 350 new neighborhood retail centers

[3] Presentation by Donna Coggeshall at UT Arlington Forum in January 2012

- 14 new malls
- 470,000 new multifamily units
- 70 million more sq. ft. of class A office space
- 350 new neighborhood retail centers.

The American Society for Engineering Education reports that the Master's enrollment in Civil Engineering grew steadily from around 8,721 in 2001 to more than 10,300 in 2010[4]. Based upon the assumption that many civil engineering students will be involved in construction projects, the student demand for construction management is growing.

Several local industry representatives such as TEXO and the CMAA North Texas Chapter have been contacted and subsequently confirmed their interest and support in this program.

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[4] *Profiles of Engineering Colleges*, American Society of Engineering Education, 2011

New Program Request Form for Master's Degree In Construction Management (MCM)

Directions: An institution shall use this form to propose a new bachelor's or master's degree program. In completing the form, the institution should refer to the document *Standards for Bachelor's and Master's Programs,* which prescribes specific requirements for new degree programs. Note: This form requires signatures of (1) the Chief Executive Officer, certifying adequacy of funding for the new program; (2) a member of the Board of Regents (or designee), certifying Board approval, and (3) if applicable, a member of the Board of Regents or (designee), certifying that criteria have been met for staff-level approval. NOTE: Preliminary authority is required for all engineering programs. An institution that does not have preliminary authority for a proposed engineering program shall submit a separate request for preliminary authority prior to submitting the degree program request form. That request shall address criteria set in Coordinating Board rules Section 5.24 (a).

Information: Contact the Division of Academic Affairs and Research at 512/427-6200 for more information.

Administrative Information

1. Institution: **The University of Texas at Arlington**

2. Program Name – Show how the program would appear on the Coordinating Board's program inventory (*e.g., Bachelor of Business Administration degree with a major in Accounting*):

Master of Construction Management (MCM)
In-class and Distance Learning

3. Proposed CIP Code:

4. Number of Required Semester Credit Hours (SCHs) (*If the number of SCHs exceeds 120 for a Bachelor's program, the institution must request a waiver documenting the compelling academic reason for requiring more SCHs*):

30 Credit Hours (Non-Thesis)

5. Brief Program Description – Describe the program and the educational objectives:

This is an interdisciplinary Distance Learning and in-class Master's program of study specifically oriented towards practitioners, it is practice oriented, and will emphasize management skills in construction project management.

6. Administrative Unit – Identify where the program would fit within the organizational structure of the university (*e.g., The Department of Electrical Engineering within the College of Engineering*):

The Department of Civil Engineering within the College of Engineering

7. Proposed Implementation Date – Report the date that students would enter the program (MM/DD/YY):

Fall Semester (August 2013)

8. Contact Person – Provide contact information for the person who can answer specific questions about the program:

Name: Dr. Mohammad Najafi

Title: Assistant Professor

E-mail: najafi@uta.edu

Phone: 817-272-0507

Program Information

I. Need

A. Job Market Need – Provide short- and long-term evidence of the need for graduates in the job market.

Construction Management (CM) is an interdisciplinary field between Engineering and Management. It focuses on the engineering & management of construction. This program is specifically oriented to emphasize the application aspects of construction. The U.S. Department of Labor predicts that employment of construction managers is expected to grow 17 percent from 2010 to 2020, about as fast as the average for all occupations. Also the median pay predicted for construction manager graduates is $83,860 per year[5].

B. Student Demand – Provide short- and long-term evidence of demand for the program.

The American Society for Engineering Education reports that the Master's enrollment in Civil engineering grew steadily from around 8,721 in 2001 to more than 10,300 in 2010[6]. Based upon the assumption that many civil engineering students will be involved in construction projects, the student demand for construction management is growing. Several local industry representatives such as TEXO and the CMAA North Texas Chapter have been contacted and subsequently confirmed their interest and support in this program. Table 1 presents the Master's degree awarded to civil engineering students in UT Arlington with focus in Construction Engineering and Management.

[5] http://www.bls.gov/ooh/Management/Construction-managers.htm
[6] *Profiles of Engineering Colleges*, American Society of Engineering Education, 2011

Table 1: Civil Engineering Graduates with Focus in Construction Management

Year	2007	2008	2009	2010	2011	Total
Total Graduates	1	15	8	18	14	56

C. Enrollment Projections – Use this table to show the estimated cumulative headcount and full-time student equivalent (FTSE) enrollment for the first five years of the program. (*Include majors only and consider attrition and graduation.*)

Based upon strong interests expressed by local industry representatives, considering the strategic location of DFW, we expect number of students to increase exponentially. Table 2 is a conservative projection of enrollments.

Table 2

YEAR	1	2	3	4	5	6	7	8	9	10
Headcount	20	25	35	40	45	50	56	62	70	75
FTSE	10	12	25	20	21	26	29	33	40	42
Degree Conferral	0	5	6	10	12	14	18	20	21	25

D. Closing Out the Program – In the unlikely event that after 10 years from start of the new Construction Management Graduate Program, it does not meet its goals, admitting new students will stop immediately. The current students in the program will be allowed to continue with their studies until they graduate. The students will be provided flexibility to take courses outside of the program or from other universities as well. The Director of the program will continue his employment with UT Arlington, as he is a faculty at Civil Engineering Department and also Director of the Center for Underground Infrastructure Research and Education (CUIRE). No other full-time hires will need to be terminated as all the courses will be taught by adjuncts and/or faculty from other departments.

II. Quality

A. Degree Requirements – Use this table to show the degree requirements of the program. *(Modify the table as needed; if necessary; replicate the table for more than one option.)*

Table 3: CM Non-Thesis Option Degree Requirement

Category	Semester Credit Hours	Clock Hours
Required Courses	15	225
Prescribed Electives	15	225
Free Electives	N/A	N/A

Other: Master's Project	Optional	
TOTAL	30	450

B. Curriculum – Use these tables to identify the required courses and prescribed electives of the program. Note with an asterisk (*) courses that would be added if the program is approved. *(Add and delete rows as needed. If applicable, replicate the tables for different tracks/options.)*

Prefix and Number	Required Courses	SCH
CE5300*	Constructions Management	3
CE5344	Construction Methods – Field Operations	3
CE5386	Construction Planning and Scheduling	3
CE5379	Construction Cost Estimating	3
CE 5387	Construction Productivity	3

Prefix and Number	Prescribed Elective Courses	SCH
CE5300*	Building Information Modeling (BIM)	3
CE5300*	Construction Sustainability	3
CE5300*	Public Private Partnerships (P3)	3
CE5300*	Construction Contract Acquisitions	3
CE5345	Infrastructure Evaluation, Maintenance, and Renewal	3
CE5388	Pipeline Construction & Trenchless Technology	3
CE5389	Infrastructure Asset Management and Sustainability	3
IE5301	Advanced Operations Research	3
IE5318	Applied Regression Analysis	3
IE6302	Facilities Planning and Design	3
ARCH5395	Sustainability for Everyone	3
ARCH5395	AUTOCAD	3
ARCH5395	BIM & Viz (Visualization)	3
ARCH5333	Construction – II	3
ARCH5326	Environmental Controls Systems	3
MANA5312	Management	3
MANA5330	Negotiations & Conflict Management	3
FINA5311	Business Financial Management	3
FINA5330	Real Options	3
REAE5311	Real Estate Analysis	3
REAE5315	Real Estate Trends & Issues	3
REAE5337	Real Property Law	3
ACCT5301	Accounting Analysis I	3
ACCT5302	Accounting Analysis II	3
ACCT5322	Accounting for Management Planning and Control	3

*New Course

In addition to regular class, use of field trips to projects that can be based on the numerous construction projects ongoing through the Metroplex and guest lecturers, will be utilized.

B. Faculty – Use these tables to provide information about Core and Support faculty. Add an asterisk (*) before the name of the individual who will have direct administrative responsibilities for the program. *(Add and delete rows as needed.)*

Name of Core Faculty and Faculty Rank	Highest Degree and Awarding Institution	Courses Assigned in Program	% Time Assigned To Program
Najafi, Mohammad Asst. Professor*	Ph.D. In Civil Engineering Louisiana Tech University	CE5344, CE5379	100%
New Faculty in Year _	No new faculty needed		

Name of Support Faculty and Faculty Rank	Highest Degree and Awarding Institution	Courses Assigned in Program	% Time Assigned To Program
Dr. Gus Khankarli* Adjunct Faculty	Ph.D. in Urban Planning The University of Texas at Dallas	CE 5300 (P3), CE5345	10%
Mr. Mike Fairchild* Adjunct Faculty	Master of Architecture, The University of Texas at Arlington	CE 5300 (Sustainability), CE 5378	10%
Mr. Daniel Darrouzet* Adjunct Faculty	Master of Architecture, University of Texas at Austin	CE 5387, CE 5377	10%
Mr. Agustin Villafana Adjunct Faculty	M.S. Civil Engineering, The University of Texas at Arlington	CE 5300 (BIM)	10%
Tom Hunt Adjunct Faculty	M.S. Civil Engineering, University of Illinois at Urbana-Champaign	CE 5300 (Construction Management)	10%
Teri Schmig Adjunct Faculty	M.S. Civil Engineering, The University of Texas at Arlington	CE 5386	10%

* Current Adjunct
NOTE: Each adjunct will teach either one or two courses per school year (one course per semester)

D. Students – Describe general recruitment efforts and admission requirements. In accordance with the institution's Uniform Recruitment and Retention Strategy, describe plans to recruit, retain, and graduate students from underrepresented groups for the program.

This program will participate in the general recruitment efforts of the UT Arlington College of Graduate Studies (CGS), College of Engineering (COE), and Department of Civil Engineering (CE) and will have the same admission requirements as the Master's programs of these departments.
UT Arlington CGS & COE will promote this CM program. In addition, CMAA will promote this CM program to local industry and corporations and will recruit heavily from these corporations.

E. Library – Provide the library director's assessment of library resources necessary for the program. Describe plans to build the library holdings to support the program.

During last six years, a large number of construction books have been purchased. No significant additional resources are needed. The library is subscribed to the *ASCE Journal of Construction Engineering and Management* and other relevant journals. A reference librarian is available during working hours to help students with their research needs.

F. Facilities and Equipment – Describe the availability and adequacy of facilities and equipment to support the program. Describe plans for facility and equipment improvements/additions.

Construction Engineering and Management teaching and research facility is currently housed in Room 139 of Civil Engineering Lab Building (CELB). The program currently has 25 students working towards M.S. or M.E. degrees, and six students working towards Ph.D. degree. The computer lab area has 30 desktop computers, two offices, a conference room, a graduate student office, a reception/waiting area, and a workroom/storage.

G. Accreditation – If the discipline has a national accrediting body, describe plans to obtain accreditation or provide a rationale for not pursuing accreditation.

Currently, the American Council for Construction Education (ACCE) http://www.acce-hq.org/ is the accreditation body that accredits undergraduate Construction Management programs, but not the Master degree programs. *The Master programs usually do not require accreditation, and current Master programs at the College of Engineering do not have accreditation.* The CM degree program utilizes existing courses from Civil Engineering, Business, Management, Industrial Engineering, Accounting, and Architecture, which meet the stated standards.

H. Evaluation – Describe the evaluation process that will be used to assess the quality and effectiveness of the new degree program.

As much as possible, existing courses will be used to offer the new Master of Construction Management degree. In addition student evaluation of faculty, an Industry Advisory Board will be specifically formed for Construction Management to review program, enrollments, quality of teaching, and survey of employers. Periodic class visits will be conducted for adjunct faculty. All adjunct faculties will be required to submit course syllabi, course outlines, and teaching plan for approval of program director before start of the semester. All graduating students will be interviewed for their input on shortcomings and possible improvements. Additionally, the graduating students will be encouraged to take the Constructors' Professional Certification exam, and/or Certified Construction Manager test, or other similar certification exams. The passing rates for these exams will demonstrate the quality of teaching and students preparations.

III. Costs and Funding

Five-Year Costs and Funding Sources - Use this table to show five-year costs and sources of funding for the program.

Five-Year Costs		Five-Year Funding	
Personnel[1]	$1,167,420	Reallocated Funds	$469,870
Facilities and Equipment	$60,000	Anticipated New Formula Funding[3]	$1,125,117
Library, Supplies, and Materials	$8,750	Special Item Funding	$0
Other (Marketing and Advertising)[2]	$21,000	Other (Industry Contributions)[4]	$20,000
Total Costs	**$1,257,170**	**Total Funding**	**$1,614,987**

1. Report costs for new faculty hires, graduate assistants, and technical support personnel. For new faculty, prorate individual salaries as a percentage of the time assigned to the program. If existing faculty will contribute to program, include costs necessary to maintain existing programs (e.g., cost of adjunct to cover courses previously taught by faculty who would teach in new program).
2. Specify other costs here (e.g., administrative costs, travel).
3. Indicate formula funding for students new to the institution because of the program; formula funding should be included only for years three through five of the program and should reflect enrollment projections for years three through five.
4. Report other sources of funding here. In-hand grants, "likely" future grants, and designated tuition and fees can be included.

Signature Page

1. Adequacy of Funding – The chief executive officer shall sign the following statement:

   I certify that the institution has adequate funds to cover the costs of the new program. Furthermore, the new program will not reduce the effectiveness or quality of existing programs at the institution.

   _____
   Chief Executive Officer Date

2. Board of Regents or Designee Approval – A member of the Board of Regents or designee shall sign the following statement:

   On behalf of the Board of Regents, I approve the program.

   _____
   Board of Regents (Designee) Date of Approval

3. Board of Regents Certification of Criteria for Commissioner of Assistant

Commissioner Approval – For a program to be approved by the Commissioner or the Assistant Commissioner for Academic Affairs and Research, the Board of Regents or designee must certify that the new program meets the eight criteria under TAC Section 5.50 (b): The criteria stipulate that the program shall:

(1) be within the institution's current Table of Programs;
(2) have a curriculum, faculty, resources, support services, and other components of a degree program that are comparable to those of high quality programs in the same or similar disciplines at other institutions;
(3) have sufficient clinical or in-service sites, if applicable, to support the program;
(4) be consistent with the standards of the Commission of Colleges of the Southern Association of Colleges and Schools and, if applicable, with the standards or discipline-specific accrediting agencies and licensing agencies;
(5) attract students on a long-term basis and produce graduates who would have opportunities for employment; or the program is appropriate for the development of a well-rounded array of basic baccalaureate degree programs at the institution;
(6) not unnecessarily duplicate existing programs at other institutions;
(7) not be dependent on future Special Item funding
(8) have new five-year costs that would not exceed $2 million.

On behalf of the Board of Regents, I certify that the new program meets the criteria specified under TAC Section 5.50 (b).

_____

Board of Regents (Designee) Date