Construction Management

CM

Strategic Plan Update

Executive Summary

Assessment FY 2014 – 2015; Assessment date – June 2015 (ClearPoint)

Department Initiatives

Of the twenty-two strategic initiatives developed in August of 2012, sixteen were completed during the last two assessment cycles. Six remain and are in progress:

- There are several research laboratories identified: Air Quality Testing, Advanced Materials/Characterization, Virtual 3D (or Building Information Modeling) and Complex Asphalt laboratories. With the renovation of Patrick Taylor Hall beginning, it is anticipated that we will have at least one of these laboratory completed by the fall of 2016.
- Research efforts have begun to establish partnerships with industry through a National Science Foundation (NSF) University/Industry Collaborative Research Center proposal and through a proposal sent to the Department of Commerce to designate Louisiana as a Chemical Manufacturing Center. Both proposals were submitted in the spring of 2015. If either is successful, the CM Department and industry will have a base from which to begin research partnerships. In anticipation, we have already created an industry research board with eleven key individuals and began the development of a standing research committee within our Construction Industry Advisory Board (CIAC). If the designation becomes a reality, it will be the catalyst for generating research collaboration to build the Louisiana infrastructure (key strategic focus of the college).
- Alliance Safety Council and Louisiana State University's College of Engineering consortium jointly operates the Mid-South OSHA Training Institute (OTI) Education Center. Efforts to integrate OSHA courses into the CM curriculum began last year with the development of an OSHA Certificate. We are on schedule to have the Certificate in operation by the end of the 2015 calendar year. Once in place, every student will have the unique opportunity to take numerous safety courses culminating with a certificate by their senior year.
- We had planned to host the Associated Schools of Construction international conference by 2016; however, this has been delayed due to the renovations of Patrick Taylor Hall. A proposal will be submitted in the next assessment cycle.
- Branding of the Bert S. Turner Department of Construction Management continues through marketing and recruiting efforts. Social media, online efforts, and high school visits contribute to the branding; however, the one of the most influential efforts should be when we co-sponsor the February 2016 ACCE Industry Advisory Council meeting in Mobile, Alabama.
- The CM Faculty and the CIAC have a symbiotic relationship enabling the two to work in conjunction to pursue academic and research related activities. The desired result would be to have industry representatives lending their time and expertise in order to enhance the overall student learning experience. To that end, an industry lecture series has been formally established. It brings a multitude of industry professionals into the classroom throughout the calendar year. Additionally, we have begun the development of a CIAC research committee.

Student Population and Retention

The Department has aggressively grown all academic programs with over 650 students seeking some form of a CM degree…this is the largest student body in Departmental history. The Master of Science in Construction Management (MSCM) program has 44 active online students and 17 campus students. The PhD in Engineering Science with a concentration in CM has 14 funded students. This totals 75 graduates enrolled in the Department. The Post-Baccalaureate Certificate in CM has over 90 students in the program with 58-62 consistently enrolling into each Module. According to the spring 2015 fourteen day roster, there are 501 students seeking a CM undergraduate degree. Our goal for next year is to continue this growth rate by heavily marketing our degrees while ensuring high quality teaching standards that can give us a competitive advantage. Also, a side but related note, CM has one of the highest college retention numbers for campus students. We have the highest LSU Online retention and lead-to-application numbers as compared to the other university programs.

Accreditation

Due to a successful request to extend our accreditation, the CM undergraduate degree is accredited through July 2017. This means we will have a visit in the spring of 2017 with the Self-Study due November 2016. No additional reports are required until the Self-Study. The program will be accredited against the new outcome based standards. The Department aligned to the new standards last year and has been collecting assessment data in preparation of the upcoming American Council for Construction Education (ACCE) visit. Faculty and staff will be compiling pertinent data for the Self-Study beginning in the Fall of 2015. Plans are to have the Self Study drafted by September 2016. Additionally, efforts have begun to apply for accreditation towards the Master of Science in Construction Management. ACCE has been notified of our intent. Dr. Hassan will be submitting the application in the Fall 2015 semester with a visit expected in March 2016. If approved, the MSCM will be one of three ACCE accredited graduate programs in the US. The other two programs are housed in Clemson University and Texas A&M.

Quality Improvement

As noted in the last assessment, the lack of senior leadership has been a challenge; however, with the hiring of two full professors, the Department is now poised to do more with industry and research. For the most part, CM is successfully contributing to the college's Strategies while meeting the vast majority of its own goals. There are three areas indicating issues (and these are carried over from the last assessment cycle): student learning, laboratory teaching/research space and the small number of tenure or tenure track faculty.

As noted last year, student learning was addressed by overhauling the curriculum as well as engaging the instructors in training and development. Several curriculum adjustments were accomplished this cycle to enhance student learning while facilitating the development of faculty. Graduate student learning outcomes are meeting targets; however, undergraduate student learning outcome results indicate improvement, but not at levels expected by faculty. Three areas seem to contribute to this issue: old curriculum students, flow of topical content, and lack of laboratories. Current program assessment has measured students that have yet to complete the new curriculum thus skewing the results. The first cohort should be in the spring of 2016 (next assessment cycle). In preparation of this (and based on course assessments), faculty are reorganizing the topical content in all of the key junior/senior CM classes. Additionally, labs have been added to several courses to enhance learning. Teaching and research laboratory spaces are being developed as the Patrick Taylor Hall renovation comes closer to reality.

The ability to obtain research funding has just recently improved with the recent hiring of two full Professors and one assistant Professors. This can be seen with the increase in proposals being submitted and the number of funded proposals (both about 2x above college averages). However, the total number of faculty in the Department remains a problem as it is affecting research funding and teaching loads (based on 2013-14 B&P metrics):

- Research expenditures per tenure/tenure track faculty: CoE- $200,663 vs CM - $120,846
- Majors per total Faculty: CoE - 39.0 vs CM - 53.5*
- Student Credit Hours per Total Faculty: CoE - 516.1 vs CM – 870*
- Degree per Total Faculty: CoE – 6.2 vs CM – 15.6*

*calculated using actual faculty lines in the machine run budget; excludes soft money positions

The Department currently has to cover 71 campus course sections per year at the undergraduate and graduate levels (note: this total excludes LSU Online courses with 18 sections per year). Our current budgeted capacity is 42 sections (6 tenure/tenure track FTE @ 3 sections per year; 3 instructors FTE @ 8 sections per year). Soft money from industry, salary savings, and research rebate is used to fund adjuncts (4), temporary full-time instructors (2), and post doctorates (2). These soft money (non-budgeted) positions cover 41% of our total teaching load and with an approximate average annual cost of $200,000.

The construction industry was gracious last year, allowing us to use a significant amount of their contributions to help fund our teaching load; however, they clearly stated to us that this should be a "temporary fix". They believe it is the job of the university to provide faculty for teaching. Accreditation standards reflect this view as they see financing for the construction unit as an indication of administrative support. An essential element of their visit to the university is to determine whether or not non-budgeted funds are used to replace institutional funds. They will also compare budgets with other departments to determine equity. With the Department covering 41% of its teaching load through one-time funds, this will be an accreditation issue if not resolved.

Reflection

This year all programs in the College of Engineering received a new Workforce and Innovation for a Stronger Economy (WISE) faculty line…except the CM Department. The WISE Implementation Plan for FY 2014-15 identified the following areas in the College of Engineering for targeted strategic investments:

Biological & Agricultural Engineering – Biotechnology (1 position), Chemical Engineering – Energy (2 positions, Chemical Engineering – Coast and Environment (1 position), Civil & Environmental Engineering (2 positions), Electrical and Computer Engineering – Entergy (1 position), Mechanical & Industrial Engineering – Computation (2 positions), and Petroleum Engineering (3 positions)

WISE funding was dedicated to increasing the production of degrees, student financial aid, research, equipment, and technology. It was to serve as the foundation to build Louisiana's current and future economy such as Energy, Coast, Computation, Biotechnology, Medical, and other four or five star related job as defined by the Louisiana Workforce Commission. Construction was notably absent in this proposal as was funding for any CM faculty positions. With the construction industry being one of the largest contributors to the economy and to the university, it was disappointing to see it excluded by the authors of this document.

The WISE Council completed a gap analysis to identify gaps between current higher education production and the demand for new workers in high-demand, high-priority fields especially for fields of study relevant to chemical manufacturing. It was found that, on average, construction had the largest gaps. As it relates to the College of Engineering, CM is rated as a Five Star job and had the 3rd largest gap between education production and workers in high-demand and high priority fields:

- Environmental/Environmental Health Engineering (126)
- Chemical Engineering (108)
- Construction Management (98)
- Petroleum Engineering (93)
- Mechanical Engineering (67)
- Computer Engineering, General (54)

- Computer Engineering, General (54)
- Civil Engineering, General (50)
- Electrical, Electronics and Communications Engineering (46)
- Naval Architecture and Marine Engineering (44)
- Engineering, General (32 - note: some of these could easily be CM related)
- Industrial Engineering (9)

As Construction Management careers vary widely, many of our graduates also work in engineering technology and business management areas (i.e. general finance, accounting, commerce, inventory, management information systems, etc.). They also can own their own business. This compounds and expands the gap between educational production and demand for construction management.

Based on college averages and the means by which LSU determined faculty WISE positions, the Department needs at least 6 new faculty lines added to their state budget…and this is to just catch up (note: this number excludes growth). Additionally, if allowed, plans are to use LSU Online funds for permanent instructor positions. Hopefully, between these two types of faculty allocations, the Department can cover teaching loads and increase research funding.

Strategy 1: Preparing LSU Engineers for a Dynamic World

Strategic Directive

We live in a dynamic, rapidly changing world. We need people trained to not only proactively meet society's current demands, but also provide solutions for problems that are yet to manifest.

Strategic Goals

A. Imbue critical-thinking skills and holistic approaches to problem solving Then, cohere these skills with multi-disciplinary teamwork and communication skills.

B. Impart life-long self-learning skills through teaching approaches that utilize fundamental concepts and technology to solve problems and learn advanced material.

C. Implement a sustainable program of faculty development and training of graduate teaching assistants, which will promote the discovery and promulgation of novel and successful teaching/learning initiatives as well as the use of best teaching/learning practices.

D. Encourage leadership, ethical practices, social responsibility and entrepreneurial qualities in students through mentoring, exposure through engineering professional society activities, participation in local and national competitions and other opportunities.

E. Develop an Engineering Campus at LSU that will provide access to state of - the-art instructional infrastructure support through the implementation of an Engineering Master Plan.

F. Broaden students' global awareness through study abroad, classroom exercises and innovative experiences.

Construction Management [Departmentl] Goals for Strategy 1:

a. Improve Student Critical Thinking Skills and Problem Solving– Courses and student activities need to be designed for the thinker with the skills to solve problems. This leads to a curriculum and activities (i.e. field trips, student competitions, etc.) that warrants constant evaluation and improvement to ensure that the students are gaining the core body of knowledge indicative of construction manager.

b. Proactively meet the dynamic demands of the construction industry– Curricula needs to be flexible enough to allow the implementation of concentrations for the various industry types

c. Improve student learning and skill sets via instructional laboratories– Laboratories are germane to student learning and the development of critical thinking skills, especially for CM students. Labs are to be developed that can effectively function on multiple levels for the various concentration areas and with the OSHA Training Institute (partnership with Alliance Safety Council).

CM BSCM Degree Program Goals:

1. To deliver a comprehensive undergraduate curriculum to better meet the needs of the various industry areas : residential, commercial, industrial, highway, and military.

2. Establish a techno-centric student construction education that prepares students to lead in the utilization of information technology in the construction industry.

3. Produce professional constructors with the ability to effectively communicate, lead, team build, interact with other professionals while maintaining ethical competence.

CM MSCM Program Goal:

4. Excel in the education of graduate majors through a vigorous program of academic learning designed to produce motivated, well-educated, responsible citizens with the management and technical skills requisite for advanced leadership positions in the construction industry.

Analysis

The College has not provided data for Measure 1.2. This single data point is mapped to the colleges Stategic Goals A-F; therefore, these goals cannot be assessed. The CM Goals seem to be successful; however, student learning is still lacking as seen by Measures 1.003 and 1.004. As noted last year, student learning was addressed by overhauling the curriculum as well as engaging the instructors in training and development. Several curriculum adjustments were accomplished this cycle to enhance student learning while facilitating the development of faculty. Graduate student learning outcomes are meeting targets; however, undergraduate student learning outcome results indicate improvement, but not at levels expected by faculty. Three areas seem to contribute to this issue: old curriculum students, flow of topical content, and lack of laboratories. Current program assessment has measured students that have yet to complete the new curriculum thus skewing the results. The first cohort should be in the spring of 2016 (next assessment cycle). In preparation of this (and based on course assessments), faculty are reorganizing the topical content in all of the key junior/senior CM classes. Additionally, labs have been added to several courses to enhance learning. Teaching and research laboratory spaces are being developed as the Patrick Taylor Hall renovation comes closer to reality.

Strategy 1: Preparing LSU Engineers for a Dynamic World

Measures

- 1.2 (A,B,C,E,J) Student ratings of degree to which LSU Engineering attributes are achieved
- 1.001 (a, b, 1-3) Program Student Learning Outcome Assessment
- 1.002 (a, b) Student Course Evaluations & Comments
- 1.003 (a, b, 1-3) Internal Senior Exit Exam
- 1.004 (a, 1-3) External AC Level 1 Exam
- 1.005 (a, b, 1-3) Graduating Senior Exit Survey
- 1.006 (c) Total Square feet of Laboratory Space*
- 1.007 (c) Number of Labs
- 1.0011 (a, b, 1-3) Program Student Learning Outcome (TaskStream)
- 1.0012 (4) MSCM Student Course Evaluations and Comments
- 1.0013 (4) MSCM Program Student Learning Outcomes (TaskStream)

Action Items

~~Meet with Architects~~	6/10/14 - 6/10/14
Reorganize Topical Content for Key Courses	6/2/15 - 8/21/15

Attachments

Initiatives

~~Develop and implement a suite of courses for concentrations in industrial, commercial, heavy highway, and residential. Target Completion Date: Fall 2013~~	8/22/12 - 12/20/13
~~Develop and implement a set of course assessments that are mapped to the CM program's student learning outcomes. Target Completion Date: Spring 2014.~~	9/1/13 - 5/22/14
~~Define usage and curricula for ELAB space and complete the space accordingly. Target Completion Date: Fall 2013~~	1/1/13 - 12/20/13

Strategy 2: Conducting Research to Improve the Quality of Life

Strategic Directive

Use-inspired research and the development of intellectual property can not only improve the quality of life for people on a global scale, but can also make an impact on our state and university. We must become more entrepreneurial to develop solutions that lead to improved quality of life and economic development. Our geographic location provides a natural environment for research. We must take advantage of the fact that "we live in the laboratory."

Strategic Goals

A. Energy and Sustainable Environment—Seek low-cost, clean, traditional and alternative energy sources for transportation and power generation including alternative fuels and their efficient combustion; employ new technology to enhance production and the efficient utilization of petroleum fuels; seek out materials and technology for compact and alternative power sources; and search for efficient power transmission and distribution. All of these efforts will be pursued with a focus on maintaining a clean and sustainable environment.

B. Engineered and Natural Infrastructure—Enhance coastal infrastructure to sustain environmental impacts; improve energy and industrial infrastructure; and develop coastal habitat and environmental infrastructure. Additional focus should center on the sustainability and interplay of the natural and built environment along with state-of-the-art monitoring systems.

C. Utilize and enhance expertise in Materials and Nano-Micro-Wafer Scale Systems to provide an integral, inter-disciplinary research and infrastructure support for the two thrust areas.

D. Leverage high-performance computing resources for research in various fields and for extending technology in high-performance computing.

E. Enhance the effectiveness of the Engineering Campus through remodeling and distribution of research space in a flexible manner.

F. Develop research infrastructure and create an ecosystem that not only attracts and retains top-notch research faculty and graduate students, but also facilitates the establishment of national engineering research centers.

Construction Management Goals for Strategy 2:

a. Enhance research faculty development**-**The CM department will invest in faculty development to increase the faculty performance with respect to research activity. That includes both research funds as well as journal publications produced by graduate faculty. The department also aims to increase faculty retention rate through by assisting junior faculty develop.

b. Develop CM Research labs– The CM department needs to build labs to support research activities in multiple important areas including, industrial material performance and characterization, indoor and outdoor air quality, sustainable construction and hazard resistant construction. This will allow the LSU CM department to compete in new and emerging vital areas of research including nano technology in construction.

c. Improve quality of life and economic development through collaborative research activities with industry- The CM department in conjunction with the CIAC will start a CM research partnership that will grow to become an industry funded research center that strives to solve the construction industry challenges.

CM MSCM Program Goal:

1. Enhance the student learning experience through engagement in advanced research and scholarly activity.

Analysis

CM's small band of researchers are progressing well. They are submitting larger proposals and more proposals than the college average; however, newly funded proposals are down. This can be attibuted to new faculty in the first stages of their career at LSU as they are ramping up their research base. The department, for the most part is meeting CM Goal (a) as the faculty continue to excel in publications, PhDs, and MSCM students. We now have 71 graduate students (14 of which are PhDs) with a 3.0 FTE research equivalent. CM Goal (b) is still negative as we have yet to establish any research lab due to space limitations. We are hopeful that the renovation of Patrick Taylor Hall will allow us usable space from which to set up research labs. CM Goal (c) has been intiated with proposal to NSF for an Industry/University Collaborative Research Center and a proposal to the Department of Commerce to designate Louisiana as a manufacturing center. The MSCM program Goal 1 is being met with graduate students activitly involved in scholarly works as well as an increase in the number of graduate students. This program is now the largest in the College of Engineering. Overall, caution and close monitoring is needed as lab space and faculty lines are allocated to the various departments with the college.

Strategy 2: Conducting Research to Improve the Quality of Life

Measures

- 2.3 (A) Total new research funding--CM
- 2.4 New research funding per FTE
- 2.5 New proposals submitted per FTE
- 2.6 New proposals funded per FTE
- 2.7 Percentage of proposals funded (based upon project credit) over $500K
- 2.9 (E) Research expenditures per square foot of research space
- 2.001 (a, 1) Total number of research faculty
- 2.002 (a,1) Number of Conferences /workshops attended each year (x per research faculty)
- 2.003 (a,1) Number of journal publications per year
- 2.004 (a) Number of Ph.D. graduates supervised each year
- 2.005 (a,1) Number of MSCM graduate students supervised each year
- 2.006 (a) Number of CM degrees granted per total faculty
- 2.007 (b) Funds acquired for CM lab space
- 2.008 (b) SF Area of CM research lab space
- 2.0011 (c) Number of industry research partners
- 2.0012 (c) Number of proposals submitted annually with industry
- 2.0013 (c) Funded research with industry
- 2.0014 (c) Total number of industry companies participating
- 2.0015 (c) Number of manuscripts published with industry each year

Initiatives

Complete one research lab. Target completion date: Fall 2016.	9/1/15 - 12/16/16
Develop a small model for industry funded research similar to CII. Target completion date: Fall 2015	8/22/14 - 12/18/15

Action Items

Attachments

Strategy 3: Innovate through Diversity

Strategic Directive

Fostering a culture of diversity adds more points of view, yields a more diverse workforce and ultimately increases the overall strength of our College.

Strategic Goals

A. Proactively engage with academic partners both in Louisiana and elsewhere to establish an active recruiting pipeline of high-quality, diverse students.

B. Establish a good rapport with feeder schools to attract diverse undergraduate and graduate students.

C. Increase diversity in recruitment and retention at all levels.

D. Enhance the learning experience by exposure to other cultures through increased global diversity.

Construction Management Goals for Strategy 3:

a. Promote the construction management identity into the populous – Proactively engage with middle/high schools community colleges, and the general public so they can be introduced to the CM and potentially choose it as a career path.

b. Foster an inclusive CM experience so as to to create opportunity for potiential t LSU students to have a more in-depth experience with the types of career paths available to them through CM.

Analysis

There was a slight improvement in this area. College and departement goals are being met. Much of this is due to a concerted recruiting campaign by faculty and staff; however, more still needs to be accomplished.

Strategy 3: Innovate through Diversity

Measures

- 3.1 Percent of underrepresented minority undergraduate students
- 3.2 Percent of female undergraduate students
- 3.3 Percent of underrepresented minority graduate students
- 3.4 Percent of female graduate students
- 3.5 Percent of US Citizen graduate students

Action Items

Attachments

Initiatives

~~Develop AS to BS online curriculum model with BRCC~~	1/1/14 - 12/18/15

Strategy 4: Improving and Diversifying Louisiana's Economy

Strategic Directive

Creating a vibrant, innovative, research-based College filled with a talent-rich pool of LSU Engineers is key to generating creative ideas and becoming an attractive partner to companies across the globe. Innovation through academia and the business world will spawn a rich environment for companies and businesses to grow locally, paving the way for further diversification of our state's economy.

Strategic Goals

A. Establish an atmosphere for entrepreneurial activities that result in start-up enterprises with a focus in emerging technologies.

B. Partner with the Louisiana's economic development team and others to diversify the state's economic base. Diversification will be accomplished by promoting an ecosystem for innovation and technology transfer that will develop and foster university/industry partnerships in targeted areas for job creation.

C. Support, reconginze and encourage faculty members' outreach for increasing College collaboration with industry and related College stakeholders.

D. Foster "for profit" relationships between the college and corporate partners.

E. Promote cooperative partnerships with our industry stakeholders that assists the needs of our students and faculty along with the partnering entity.

Construction Management Goals for Strategy 4:

a. Increase industry awareness of education, research, and outreach activities– As the CM department expands its collaborative efforts, it is important for these activities to be promoted and advertised. Awareness should result from forums with industry, collaborative education/research/service programs.

b. Foster industry participation co-op/internships – Increasing student participation in co-op and internships will indirectly improve Louisiana's economy. The practical work experience that students obtain through these opportunities coupled with their CM classwork will better equip students in their future careers.

c. Promote construction safety through collaboration – For a construction manager, construction safety is essential for company's growth or to becoming an attractive business partner. Providing opportunities for industry to easily collaborate with the department will create partnerships that benefit both entities and potentially offer opportunities for startup companies. The exchange of knowledge will improve and increase Louisiana's economy and help local business grow

Analysis

Positive progress has been made towards CoE A, B, and D as research efforts have begun to establish partnerships with industry through a National Science Foundation (NSF) University/Industry Collaborative Research Center proposal and through a proposal sent to the Department of Commerce to designate Louisiana as a Chemical Manufacturing Center. Both proposals were submitted in the spring of 2015. If either is successful, the CM Department and industry will have a base from which to begin research partnerships. In anticipation, we have already created an industry research board with eleven key individuals and began the development of a standing research committee within our Construction Industry Advisory Board (CIAC). If the designation becomes a reality, it will be the catalyst for generating research collaboration to build the Louisiana infrastructure (key strategic focus of the college). The remainng CoE goals and the Department's goals are all being meet as the involvment with industry remains strong.

Strategy 4: Improving and Diversifying Louisiana's Economy

Measures

- 4.6 Number of corporate interactions with departments/research centers
- 4.8 Total Industrial Research funding
- 4.9 New industrial research funding per research FTE
- 4.001 (a) Funding from Construction Industry Advisory Board
- 4.002 (a) Funding from the CM Alumni Association
- 4.004 (a) CIAC annual membership
- 4.005 (a) CM Alumni annual membership (cumulative)
- 4.006 (b) Number of companies participating in co-op/internships
- 4.008 (c) Number of collaborative construction related activities with industry
- 4.009 (c) Number of OSHA courses delivered

Action Items

Attachments

Initiatives

~~Develop advisory board with LSU and Alliance Safety Council for the joint OSHA Training Institute~~	8/22/12 - 5/17/13
Integrate OSHA courses into CM curriculum	5/22/13 - 8/14/15
Intergrate CM Faculty with Inustry partners with various activities.	1/1/14 - 12/19/14

Strategy 5: Enhance Recruitment and Retention

Strategic Directive

For a student, engineering is a challenging area of study. It is important to build a welcoming community of immersion that will offer support and help budding engineers form close-knit bonds with other students to ease their transition through the early freshman/sophomore years.

Strategic Goals

A. Design all student-oriented services and communications to efficiently utilize students' time through proactive and sensitive actions by faculty and staff, to create a welcoming and inclusive learning environment.

B. Offer enhanced Residential College and off-class experiences to develop a sense of community through periodically organized activities by student professional societies and other groups.

C. Enhance student advising and mentoring experience, and the quality of on- and off-class contact time with faculty members.

D. Provide convenient, flexible and safe places for students to gather and study.

E. Create and implement best practices in engineering education that recognize the changing background of students and also the rapidly changing technologies.

Construction Management Goals for Strategy 5:

a. Foster a sense of community within the CM student body. Increasing student participation in various academic and industry functions allows student to network with their peers and potential employers.

Analysis

The Department has aggressively grown all academic programs with over 650 students seeking some form of a CM degree…this is the largest student body in Departmental history. The Master of Science in Construction Management (MSCM) program has 44 active online students and 17 campus students. The PhD in Engineering Science with a concentration in CM has 14 funded students. This totals 75 graduates enrolled in the Department. The Post-Baccalaureate Certificate in CM has over 90 students in the program with 58-62 consistently enrolling into each Module. According to the spring 2015 fourteen day roster, there are 501 students seeking a CM undergraduate degree. Our goal for next year is to continue this growth rate by heavily marketing our degrees while ensuring high quality teaching standards that can give us a competitive advantage. Also, a side but related note, CM has one of the highest college retention numbers for campus students. We have the highest LSU Online retention and lead-to-application numbers as compared to the other university programs.

Strategy 5: Enhance Recruitment and Retention

Measures

- 5.1 Retention Rate for the Department(1-2 curricula years)
- 5.2 Retention Rate for the Department (3-4 curricula years)
- 5.3 Graduation Rate in the Department - 6 year
- 5.10 Total number of graduates annually
- 5.11 Total number of Masters degrees per TTT TTF awarded annually
- 5.14 (A,C,D,E,F,G) Total number of undergraduates/faculty
- 5.13 (A,C,D,E,F,G) Total number of enrollment
- 5.001 (a) Number of first time full time freshman
- 5.002 (a) Number of counselors contacted annually
- 5.004 (a) Average number of students in CSA during the year
- 5.005 (a) Number of mentorship relationships produced each year
- 5.006 (a) Number of field trip participants each year
- 5.007 (a) Number of Sigma Lambda Chi members
- 5.008 (a) Number of interviews at Construction Interview Day (CID)
- 5.009 (a) Number of companies attending Construction Interview Day (CID)
- 5.0010 (a) Number of students enrolled in the elective internship course
- 5.0011 (a) Average GPA for graduating seniors
- 5.0012 (a) Average annual salary of graduates
- 5.0013 (a) Graduate job placement rate

Initiatives

✔	~~Develop a comprehensive recruiting program~~	1/1/14 - 12/19/14
✔	~~Complete the legislative initiative with LSU-S via online coursework.~~	8/22/14 - 12/25/15
✔	~~Showcase student acheivement.~~	8/17/12 - 12/19/14

Action Items

Attachments

Strategy 6: Improving the College's Visibility

Strategic Directive

Louisiana is a state steeped in engineering and construction management. The flagship university produces talented, highly recruited engineering graduates who thrive in the workforce. Global companies look at us to meet many of their employee needs. It efforts equal the quality of our students and convey these facts to our stakeholders in order to grow and fulfill our mission.

Strategic Goals

A. Focus communication to College stakeholders regarding opportunities offered by the College and its units. Stakeholders include students, alumni, friends, industries, appropriate government offices, academic partners and colleagues.

B. Enhance, standardize and upgrade department and College communications (print, web, face-to-face, etc.) to effectively project the College's brand and image, and disseminate its activities, achievements, and opportunities.

C. Exploit faculty/staff accomplishments that recognize professional activities, innovative research, as well as in the election to membership in national committees and academies.

Construction Management Goals for Strategy 6:

a. Do a better job marketing (branding) LSU CM to the population. Opportunities to focus communications back to the department are unlimited due to social networking. Conveying student and faculty achievement, hosting international events, branding the CM image on various activities, and communicating with stakeholders help CM graduates thrive in the workforce as well as meeting industry needs. *Target Completion Date*: Fall 2017

Analysis

CM has made great strides in promoting itself through recruiting, social media, conferences, and student competitions. We have a new video linked to many different social media outlets. All with the general goal of dispersing information about the department and promoting our overall 'brand'. This branding includes multiple organizational email blasts and social media pages we are able to express the accomplishments of our faculty, staff, and students. Much attention was directed towards marketing the department through Facebook, LinkedIn, state high school councelors, trinkets, t-shirts, etc.

Strategy 6: Improving the College's Visibility

Measures

- 6.001 (a) Number of Facebook "likes"
- 6.002 (a) Number of sessions on the CM webpage
- 6.003 (a) Number of contacts through LinkedIn
- 6.004 (a) Number of student recognized for their achievements
- 6.005 (a) Number of faculty recognized for their achievements
- 6.007 (a) Number of Conferences attended by faculty - data can also be found in measure 2.002
- 6.008 (a) Number of Student Competition Teams
- 6.009 (a) Number of faculty presentations/posters
- 6.0010 (a) Number of professional or academic leadership positions held by faculty

Action Items

Attachments

Initiatives

Host an international conference for the Associated Schools of Construction.	10/15/14 - 4/30/16
Branding the CM Department throughout the stakeholders.	5/30/13 - 1/12/16
~~To develop a social media structure.~~	9/1/12 - 5/23/13

Strategy 7: Diverse Streams of Support

Strategic Directive

Our College possesses the talent, skills and leadership to undertake unique opportunities that are often presented. We must diversify funding sources for establishing a pool of working capital so that we can be flexible and nimble enough to respond to the many opportunities that arise.

Strategic Goals

A.This strategy measures our philanthropic and stewardship progress.

Construction Management Goals for Strategy 7:

a. Diversify traditional instruction to include online deliveries**.** The market is ready for quality online instruction. Technology and social websites have brought teaching to new heights. Along with this comes opportunities to establish working capital that can fund the program when needs arise.

b. Enhance a philanthropic efforts to stabilize instructor employment. National trends for engineering colleges indicate the increase of tenure and tenure track faculty to fulfill research needs; however, in most cases, this begins to decrease or eliminate the full time teaching positions. CM programs depend on instructors with industry experience to deliver core construction content to its students. The construction industry is uniquely positioned to assist the Department in diversifying its funding sources

Analysis

No college data supplied; howeever, as noted at the end of the last cycle, funding diversity provided by the Department has increased due to the creation of two online facilitators (the Post Baccalaureate Certificate and the MSCM Online) and the implementation of the OTI OSHA courses in association with Alliance Safety Council. These teaching opportunities enhance the department's earning capital while promoting the LSU 'brand'. Other funding opportunities include donations, such as the one received yearly from the Construction Industry Advisory Council. These areas of revenue greatly enhance the departments flexibility when opportunities or needs do arise. Overall, like the previous year, the department appears to to be moving in an positive direction regarding various and diverse forms of support.

Strategy 7: Diverse Streams of Support

Measures

- 7.1 # Visits to Core Portfolio of Donors
- 7.2 Number of Total Philanthropic Proposals Submitted
- 7.3 Number Philanthropic Proposals Funded
- 7.4 Number of Total Visits by Development
- 7.5 Philanthropic Funds Raised-CM
- 7.6 Alumni/donor special annual events or activities
- 7.001 (a) Commutative total number of online courses developed
- 7.003 (a) Commutative total number Certificates developed
- 7.004 (a) Number of students enrolled in online courses
- 7.005 (a) Number of online courses taught
- 7.006 (a) Number of online certificates awarded
- 7.007 (a) Number of online MSCM degrees awarded
- 7.008 (b) Number instructors and/or PIR lines funded

Action Items

Attachments

Initiatives

~~Modify and streamline the CM curriculum so it is conducive to on-line applications and accreditation.~~	8/22/12 - 7/26/13
~~Develop and Implement an online Master of Science in Construction Management (MSCM) program .~~	8/22/12 - 7/26/13
~~Develop and implement a Construction Management Certificate program.~~	1/12/13 - 3/4/13
~~Develop an industry funded instructor position – Construction Educator of Practice (CEPs):~~	1/1/13 - 3/4/13

Strategy 8: Effective Decision Making

Strategic Directive

Leading engineering institutions thrive in creating special environments that foster this strategy. In doing so, we will efficiently and expeditiously achieve our long-term goals.

Strategic Goals

A. Provide an effective decision making environment that enhances operational effectiveness.

B. Institute flexible and agile organizational models to respond to changing educational, research and outreach opportunities.

C. Promote faculty and staff to continually improve the quality of service provided.

Construction Management Goals for Strategy 8:

a. Improve departmental communications. Generate awareness of relevant department activities and personnel needs while establishing hierarchal stability.

Analysis

Goals are being achieved. Within our department, communication is key. Many areas of involvement are evolving so quickly that staff weekly and faculty monthly meetings were established in order to facilitate better understanding and operations. Currently all personnel have complete access to basic forms and information on the CM server. This "hub" of communication is kept up-to-date.

Strategy 8: Effective Decision Making

Measures

- 8.2 Percent of Staff - Increased Knowledge, Skills and Abilities (2+ trainings)
- 8.001 (a) Number of Meetings
- 8.002 (a) Average percentage of faculty attending meetings
- 8.003 (a) Number of faculty/staff with access to CM share folder
- 8.004 (a) Cummlative number of documents in share folder

Action Items

Attachments

Initiatives

✔	~~Create documentation outlining department procedures and defining levels of authority required for decision making. Target completion date~~	8/22/12 - 12/27/13
✔	~~Develop an online document storage system for faculty access to all committee minutes and other relevant data. Target completion date~~	8/22/12 - 12/21/12
✔	~~Update faculty/staff computers~~	8/22/12 - 7/26/13