Proposal for Dual-enrollment JD/MSCE

A. BACKGROUND

The Law School and the Department of Civil, Construction, and Environmental Engineering propose a dual enrollment program between two longstanding degree programs, the JD and the MSCE.

As traditionally the Law School has attracted engineers into the program, we believe that it makes sense to offer the incentive to earn this degree through the dual degree process. We began discussing this proposal between the Law School and the College of Engineering recently as we continue to watch the demand for engineers with legal business experience continue to rise, especially within our own State and region.

The Law School currently has dual-degree programs with the MBA Program (JD/MBA), and the CE Department currently has a dual-degree program as well with the MBA Program (MBA/MSCE). Our approach has been to model a dual JD/MSCE very closely on these templates.

**Duplication at UA or other Alabama institutions:** To our knowledge, there is no other dual-degree program (JD/MSCE) that is similar to what we are proposing.

**Demand:**

A. *Projected enrollment years 1-5* – The JD program traditionally has had approximately 5-8 engineering students in their program. The civil and construction engineering undergraduate programs have grown tremendously in the last few years (noting the undergraduate construction engineering program is only three years old) from approximately 220 students to nearly 600 undergraduate students in total. The number of BS graduates in civil engineering (CE) and construction engineering (ConE) is projected to top 100 annually within a year. Traditionally, about 10% of our current BS graduates join the current research-focused MSCE plan 1 graduate program with the other 90% going directly to work for industry with many of these students expressing (during senior exit interviews) an interest in attending law school following graduation. We anticipate that approximately 5 or more of these legal-oriented students would immediately find this dual-enrollment program attractive. This program should also be attractive to engineering graduates from other universities and will significantly enhance the CCEE department’s ability to attract graduate students from those universities. Our projection is 3 additional students joining this cohort in the first year, growing to approximately 8/year in three years.

B. *Projected number of completions years 1-5* – We anticipate that every student that begins the program will complete the program in the prescribed 3-4 year timeframe. Some students may take an extra semester to complete the MSCE. Realistically, we should plan for a 1-student attrition per cohort.

**Additional resources needed, if any (personnel, facilities, equipment, library holdings):** No additional resources are anticipated as the students will be part of the existing JD and MSCE programs as they are currently structured.

B. APPLICATION and ADMISSION

**Criteria:** It will be mandatory that each student must be admitted to both programs separately before being allowed to begin coursework in the dual-degree program. If a student drops out of the dual JD/MSCE program and chooses to complete only one of the two programs individually, the student must revert back to the full program requirements for that particular program.
**Procedures:** All current procedures for both programs will continue so as to maintain consistency and integrity of the degrees.

**C. SCHOLASTIC REQUIREMENTS**

A. Admission Requirements – The admission requirements for the two dual degree programs will be exactly as they currently exist for each program separately.

For the JD Program, there are no prerequisite courses but there are strict admissions standards based on numerous factors including but not limited to LSAT exam score, GPA, transcript review, interview with the Law School staff, work experience, and leadership experience.

The admission requirement for the MSCE is an earned ABET/EAC-accredited baccalaureate degree with a grade point average of at least 3.0 on a 4.0 scale, or at least 3.0 for the last 60 hours completed. Applicants who do not have an ABET/EAC-accredited degree can be admitted if they have Graduate Record Examination (GRE) scores of 1000 (verbal plus quantitative) or higher, and grade point averages of 3.0 or higher on a 4.0 scale. International students must also have a TOEFL score of at least 213/300 on the computerized exam, 79/120 on the internet-based exam, or 550 on the standardized exam. The requirement for the TOEFL is waived for international students who have received a degree from a US institution within three years prior to applying for admission to The University of Alabama. Provisional admission is available for students who do not meet the above minimum requirements. Admission in such cases is considered on a case-by-case basis.

B. Degree Requirements – The current JD program is a minimum of 90 hours of coursework, with 6 of those hours capable of being taken in approved courses outside the Law School. The degree is a cohort based program completed in 3-4 years. For dual JD/MSCE students, 12 hours of CE courses will be a part of the 90 hour core.

The current Plan II Master of Science in Civil Engineering requires 30 hours of coursework. A minimum of 18 hours is required to be in civil engineering (CE-prefix) courses and an allowed maximum of 12 hours of coursework may come from outside of civil engineering (non-CE courses). For the dual JD/MSCE students, the currently allowed 12 hours of non-CE coursework will simply be prescribed by allowing the 12 hours to be taken in the Law School. With reference to the required minimum 18 hours of CE coursework, each concentration area within the department has a defined 9 hour core course requirement, which will continue to be required for all dual JD/MSCE students.

In summary, a total of 96 credit hours is required for the proposed dual degree program. This would be 6 credit hours less than what is currently allowed considering both degree program requirements, with the reduction being the result of the JD allowing 12 versus 6 hours from outside Law for students in this proposed program.

The curricular plans of study for the JD and MSCE programs are included in Attachments A and B, respectively. The curricular plan of study for this dual-degree program is outlined in Attachment C.

C. Transfer of Credit – Both programs will maintain the current rules regarding transfer credit, as outlined in the Graduate School Catalog. As a general rule, since our program is cohort based, we do not generally accept transfer credit. In the case where we do, it must be agreed upon by the program director. Since the dual-degree students will be coming from engineering programs, transfer credit for the engineering courses will be allowed within current graduate school and department policies.

D. Comprehensive Examinations/Capstone Experiences – The JD Program does not have a mandatory exam or capstone experience. The Plan II MSCE degree requires a comprehensive exam over engineering topics appropriate to the students engineering course work.
E. Time Limit: As per Graduate School regulations, students in this program will have 6 years to complete this degree from the time of matriculation.

Both degrees will be conferred in the same commencement exercise once all degree requirements have been met. Neither degree will be granted until both degrees are earned unless a student formally withdraws from the dual-degree program. If a dual-degree student were to discontinue this dual degree program and continue with just one of the degrees, all requirements for that degree must be met to receive the other degree.

C. Approvals

The JD/MSCE dual-degree program, as proposed herein, has been approved by the faculty of both programs, the Dean of the College of Engineering, and the Dean of the Law School.
Attachment A – JD Core Course Requirements

Students pursuing the juris doctor (JD) are required to complete at least 90 semester hours of credit for work in the Law School, including all required courses. The specific required course requirements are as follows:

First Year

1st semester (16 Hours)
- LAW 600 Contracts I (2)
- LAW 602 Torts (4)
- LAW 603 Criminal Law (4)
- LAW 608 Civil Procedure (4)
- LAW 610 Legal Writing and Research (2)

2nd semester (16 hours)
- LAW 605 Contracts II (3)
- LAW 601 Property (4)
- LAW 609 Constitutional Law (4)
- LAW 642 Evidence (3)
- LAW 648 Research and Writing (Moot Court) (2)

Each student must take LAW 660 The Legal Profession, at least one seminar as a requirement for graduation, with the exception of students who submit a publishable article to one of the law school’s journals, if such exception is approved by the journal’s faculty adviser.

Each student is required to successfully complete three credit hours of professional skills courses. The following classes have been approved by the faculty as designated Professional Skills classes:

- LAW 665 Law Clinics
- LAW 688 Law Office Practice
- LAW 708 Legal Counseling and Interviewing
- LAW 744 Legislative Drafting
- LAW 636 Litigation Drafting
- LAW 779 Mediation
- LAW 621 Negotiation
- LAW 672 Real Estate Practice Workshop
- LAW 816 Transactional Drafting
- LAW 663 Trial Advocacy I
- LAW 673 Trial Advocacy I (Criminal Litigation)
- LAW 664 Trial Advocacy II
- LAW 604 Trial Advocacy II (Criminal Litigation)
- LAW 728 Trial Advocacy Competition Class
Attachment B – MSCE Core Course Requirements

Students pursuing the MSCE are required to complete 30 hours of acceptable graduate coursework, including a set of core courses. CE 573 Statistical Application in Civil Engineering is required for all graduate students with other core course requirements based on the student’s area of study. The specific core course requirements for each area are as follows:

Construction Engineering and Management
CE 573 Statistical Applications in Civil Engineering
CE 567 Construction Administration and Finance
CE 568 Construction Scheduling

Environmental and Water Resources Engineering
CE 573 Statistical Applications in Civil Engineering
CE 525 Air Pollution Engineering
One of the following:
CE 524 Waste and Wastewater treatment
CE 527 Stormwater Management
CE 585 Construction Site Erosion Control,
CE 575 Hydrology, or
CE 570 Open Channel Flow

Structural Engineering and Materials
CE 573 Statistical Applications in Civil Engineering
CE 534 Advanced Structural Mechanics
At least one of the following design courses:
CE 537 Reinforced Concrete II
CE 538 Steel Design II, or
CE 544 Foundation Engineering.

Transportation Engineering
CE 573 Statistical Applications in Civil Engineering
CE 551 Geometric Design
CE 558 Traffic Engineering

Including the core courses defined above, students must complete a minimum of 18 hours of CE coursework for the MSCE. Up to 12 hours of coursework may be taken outside of CE. All coursework must be approved by the student’s graduate advisor.
Attachment C – Proposed Joint JD/MSCE Core Course Requirements

Students pursuing the joint JD/MSCE are required to satisfy both degree program requirements with recognition of specific courses that simultaneously count towards both degrees. Based on existing degree requirements, the JD will accept up to 12 hours from CE and the MSCE will accept up to 12 hours from the JD.

Law will accept up to 12 hours toward Law School graduation credit from the following Civil Engineering graduate courses:

- CE 515 Advanced Engineering Economics
- CE 517 Advanced Project Management
- CE 518 Engineering Management
- CE 522 Solid and Hazardous Waste Management
- CE 525 Air Pollution
- CE 527 Storm Water Management
- CE 552 Traffic Safety and Security
- CE 553 Intelligent Transportation Systems
- CE 554 Urban Transportation Planning
- CE 564 Safety Engineering
- CE 581 Legal Aspects of Engineering and Construction
- CE 629 Environmental Regulations
- CE 580 Forensic Engineering

Civil Engineering will accept 12 hours toward the Masters Degree from the following Law courses:

- LAW 601 Property Law
- LAW 620 Computers and the Law
- LAW 680 Natural Resources Law
- LAW 690 Water Law
- LAW 691 Construction Law
- LAW 694 Land Use Planning
- LAW 697 Workers Compensation Law
- LAW 702 Environmental Law I (NEPA, Air, and Water)
- LAW 704 Employment Law: Occupational Safety and Health
- LAW 721 Employment Discrimination Law
- LAW 723 Law and Economics
- LAW 738 Environmental Law and Policy: Coastal Law
- LAW 763 Problems in Environmental Law (Protecting the Global Environment)
- LAW 766 Real Estate Development
- LAW 771 Environmental Law II (Toxins and Hazardous Waste)

Separately, a minimum of 90 hours is required for the JD and a minimum of 30 hours is required for the MSCE. With the 12 hours (maximum) of specified CE electives allowed to count towards the JD and the 12 hours (maximum) of specified JD courses counting towards the MSCE, this proposed program dual degree program will require a minimum of 96 credit hours for both degrees.
Attachment D – Example Curriculum for a Student in the Proposed Joint JD/MSCE

The following is simply an example of a curriculum a student could follow. This is only to serve as an example and is not required. The specific curriculum a student may follow would be based on his/her professional background and interests within both law and civil engineering.
The dual JD/MSCE program allows up to 12 credit hours of specified CE electives to count towards the JD and a maximum of 12 credit hours of specified LAW courses to count towards the MSCE. The joint degree program, therefore, requires a minimum of 96 credit hours total for both degrees.

Students in the joint JD/MSCE degree program will follow the first year curriculum (32 hours) prescribed by the Law School (see below). The joint degree program effectively begins after the first year of the JD curriculum is complete. Joint JD/MSCE students will work with advisors from both programs prior to their third semester to assure an appropriate plan of study is developed and progress is made to satisfy the requirements of both degrees.

The following is simply an example of a curriculum a student could follow. This is only to serve as an example and is not required. The specific curriculum a student may follow would be based on his/her professional background and interests within both law and civil engineering.

<table>
<thead>
<tr>
<th>Fall Term, First Year</th>
<th>Hours</th>
<th>Spring Term, First Year</th>
<th>Hours</th>
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<tbody>
<tr>
<td>LAW 600 Contracts</td>
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<td>LAW 601 Property</td>
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<tr>
<td>LAW 602 Torts</td>
<td>4</td>
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<td>LAW 610 Legal Writing and Research</td>
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<td>LAW 648 Research and Writing (Moot Court)</td>
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<th>Hours</th>
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<tbody>
<tr>
<td>LAW 660 The Legal Profession</td>
<td>3</td>
<td>CE Elective approved for JD (see list below)</td>
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<tr>
<td>CE 573 Statistical Applications in Civil Engineering</td>
<td>3</td>
<td>CE Core Course (see below)</td>
<td>3</td>
</tr>
<tr>
<td>CE Elective approved for JD (see list below)</td>
<td>3</td>
<td>LAW Elective approved for MSCE (see list below)</td>
<td>2</td>
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<tr>
<td>LAW Elective</td>
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<td>LAW Seminar</td>
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<th>Spring Term, Third Year</th>
<th>Hours</th>
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<tbody>
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<td>LAW Elective approved for MSCE (see list below)</td>
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<tr>
<td>LAW Elective approved for MSCE (see list below)</td>
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<td>LAW Electives</td>
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<tr>
<td>LAW Skills Class</td>
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<td>LAW Electives</td>
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<tr>
<th>Fall Term, Fourth Year</th>
<th>Hours</th>
<th>Spring Term, Fourth Year</th>
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<tbody>
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<td>LAW Elective approved for MSCE (see list below)</td>
<td>2</td>
</tr>
<tr>
<td>LAW Electives</td>
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<td>CE Elective approved for JD (see below)</td>
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</tr>
<tr>
<td></td>
<td>10</td>
<td>LAW Electives</td>
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September 17, 2010
The JD requires a minimum of 90 credit hours, including a maximum of 12 credit hours of approved coursework from the MSCE. The following CE courses are approved for joint credit from the MSCE in the JD.

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The MSCE requires a minimum of 30 credit hours, including up to 12 credit hours of approved coursework from the JD. The following LAW courses are approved for joint credit from the JD in the MSCE.

|----------------------------------|----------------------|-----------------------------|-----------------------------|-------------------|--------------------------|---------------------------|-------------------------------|

Students pursuing the MSCE are required to complete, as part of their degree requirements, a set of three core courses (9 credit hours) prescribed by the student's area of interest.

<table>
<thead>
<tr>
<th>MSCE Core Course Requirements (9 credit hours)</th>
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<tbody>
<tr>
<td>Construction Engineering and Management</td>
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<tr>
<td>CE 573</td>
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<td>CE 567</td>
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<td>CE 568</td>
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<tr>
<td>Environmental and Water Resources Engineering</td>
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<td>CE 573</td>
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<td>CE 525</td>
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<td>CE 524, CE 527, CE 585, CE 575, or CE 570</td>
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The Joint JD/MSCE program is designed primarily for MSCE Plan II (coursework only, non-thesis option) students. If the MSCE Plan I (thesis option) is pursued, a maximum of six hours of LAW coursework will be allowed to count towards the MSCE (versus up to 12 hours for the MSCE Plan II).

For additional information on the JD, please visit law.ua.edu.
For additional information on the MSCE, please visit cce.eng.ua.edu.

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¹ Other courses may be allowed, please see an advisor