CGS Agenda Item: 12-70
Effective: Fall 2013

Proposal for Dual Degree Programs by
Master of Science in Technology and
Master of Science in Sustainable Energy

Program Mission: The purpose of the Dual Degree Program leading to degrees in both the Master of Science in Technology and Master of Science in Sustainable Energy is to provide an opportunity for candidates who seek to develop advanced knowledge and skills in leadership and management of technological issues and resources and those who seek to complement that expertise with leadership and management in the energy industry an opportunity to pursue both areas of interest. The dual degree program is designed to meet the mission of each degree program.

Admission Requirements: To be eligible for degree candidacy in both programs, applicants must meet all of the requirements for admission to the Graduate School (see "Admission to Degree and Certificate Programs").

- Admission to the Master of Science in Technology In addition to the published university graduate degree status requirements, applicants must meet all of the requirements for the Master of Science in Technology established by the School of Technology as outlined in the current Graduate Catalog.
- Admission the Master of Science in Sustainable Energy: In addition to the published university graduate degree status requirements, applicant must meet all of the admission requirements for the Master of Science in Sustainable Energy established by the Center for clean Energy Research and Education (CENCERE) as outlined in the current Graduate Catalog.

Degree Audit: The graduate plan of study is the EIU Degree Audit, which is generated automatically in the Degree Audit Reporting System (DARS) at the time of degree or certificate candidacy. Modifications of the standard EIU Degree Audit are submitted by the graduate coordinator to the certification officer in the Graduate School at the time modifications are approved. The Degree Audit serves as an unofficial summary of requirements for the program. Degree and certificate candidates are advised to review the comprehensive summary of the Degree Audit process specified on the "Requirements for All Degree and Certificate Candidates" section of the *Graduate Catalog*. Individual programs may require candidates to submit plans of study in addition to the Degree Audit; candidates should consult with the program Coordinator.

Degree Requirements

Shared Coursework: The following courses may be applied to each degree program:

• TEC 5103	3	(Science & Technology of Leadership)
• TEC 5133	3	(Total Quality Systems)
• TEC 5533	3	(Biomass Gasification)
• TEC 5143	3	(Research in Technology)
• Total	12	

Technology Coursework: The following courses are required for the MS in Technology

• TEC 5173	3	(Global Technology)
• TEC Electives	17	
• Total	20	

CENERE Coursework: The following courses are required for the MS in Sustainable Energy

• BIO 5333	3	(Bio-energy and Bio-resources)
• CHM 5007	3	(Energy Chemistry)
• PHY 5113	3	(Energy Physics)
• MBA 5001	3	(Business Operations in Sustainable Energy Facilities)
• PLS 5843 or ECN 5411	3	(Topical Seminar
• COM/ENG 5260	3	(Communication/Writing)
• CERE 5983	3	(Sustainability Practicum)
• CERE 5953	3	(Research in Sustainable Energy)
• Total	24	

Total hours required in the TEC/CENCRE Dual Degree Program

- Shared Courses 12
- TEC Courses 20
- CENCERE Courses 24
- Total 56

Appendix: Course Matrix for Both MS in Technology and MS in Sustainable Energy

Master of Science in Sustainable Energy	Master of Science in Technology
1. BIO 5333 Bioenergy and Bioresources (option for BIO and CHM majors) 1. BIO 5203 Environmental Biology and Sustainability (option for non-BIO majors)	
2. CHM 5007 Energy Chemistry	
3. PHY 5233 Energy and the Environment	
4. TEC 5533 Biomass Gasification	TEC 5533 Biomass Gasification (Elective)
5. TEC 5103 Science and Technology of Leadership 5. MBA 5680 Organizational Behavior and Group Dynamics	TEC 5103 Science and Technology of Leadership (Required)
6. TEC 5133 Total Quality Systems 6. MBA 5660 Operations Management	TEC 5133 Total Quality Systems (Required)
7. MBA 5001 Business Operations in Sustainable Energy Facilities	
8. PLS 5843 Seminar in Public Policy 8. ECN 5411 Seminar in Natural Resources and Environmental Economics	
9. TEC 5143 Research in Technology	TEC 5143 Research in Technology (Required)
10. CMN/ENG 5260 Communication in Science and Technical Organizations	
11. CERE 5983 Sustainability Practicum	
12. CERE 5953 Sustainable Energy Research	
	TEC 5173 Global Technology (Required)
	TEC Electives 17 Hours
Total: 36 Hours	Total: 32 Hours

APPROVALS

Date approved by the School of Technology Curriculum Committee: 9/27/12

Date approved by the college curriculum committee: 11/12/12

Date approved by the Honors Council *(if this is an honors course): N/A*

Date approved by CAA: N/A **CGS:**