

The University Senate of Michigan Technological University

Proposal 11-20

(Voting Units: Academic)

Establishment of a New Graduate Certificate in Forensic Accounting

Submitted by:
Master of Science in Accounting (MSA) Program
College of Business

1. **Proposal Date:** July 26, 2019
2. **Proposing Contacts and Departments:** Joel C. Tuoriniemi, MSA Program Director
(jctuorin@mtu.edu)
3. **Sponsor Department Approvals:** Not Applicable
4. **General Description and Characteristics of Certificate**

4.1 General Description

The College of Business at Michigan Tech proposes a nine credit Certificate in Forensic Accounting. Forensic accountants investigate and prevent white-collar criminal activity in the financial and banking sectors. They combine their accounting knowledge with investigative skills in various litigation support. Forensic accountants also have the knowledge to assist in development of corporate accounting systems and risk assessment to help prevent fraud. They are employed by public accounting firms, corporations, and governmental units.

The proposed certificate provides graduate students with the ability to detect and prevent fraudulent activity through a series of case studies, risk analysis techniques, and auditing studies.

4.2 Catalog Description

Coursework in the Forensic Accounting Certificate is designed to allow students to develop knowledge and skills in investigative accounting and fraud prevention. Our contemporary program combines traditional auditing principles with information security and data analysis techniques to provide students with advanced forensics training.

5. Rationale

In the wake of scandals such as Madoff, Wells Fargo, Enron and many others, the demand for Forensic Accountants has grown about 20% per year. It is estimated by the Association of Certified Fraud Examiners that approximately 5% annual revenue around

the world is lost to fraud. Globally that translates to \$3.5 trillion in potential losses. Fraud is notoriously difficult to detect and counteract; the typical perpetrator is intelligent, well-educated and in a position that allows them to easily cover their tracks.

Forensic accountants generally enjoy a 31% income premium over their peers. There are 2 main certificates options open for Forensic Accountants, the CFE (Certified Fraud Examiner) and CFF (Certified in Financial Forensics). The Certificate in Forensic Accounting would assist the students in passing those examinations.

6. **Related Programs**

The following is a sampling of AACSB accredited schools that offer related programs:

- a. The University of North Carolina – Charlotte offers a 9-credit Forensic Accounting Certificate. <https://continuinged.uncc.edu/forensic>
- b. Florida Atlantic University offers a 9-credit Forensic Accounting concentration as part of its Master of Science in Accounting program. <https://accounting.fau.edu/online-master-of-accounting-in-forensic-accounting/>
- c. SUNY Polytechnic Institute offers a 9-credit Forensic Accounting & Valuation Concentration as part of its Master of Science in Accounting program. <https://sunypoly.edu/academics/majors-and-programs/ms-accountancy/forensic-accounting.html>
- d. Rider University offers a 12-credit Forensic Accounting Graduate Certificate. <https://www.rider.edu/academics/colleges-schools/college-business-administration/graduate-programs/forensic-accounting-graduate-certificate-program>
- e. Purdue University Northwest offers a 12-credit Forensic Accounting Certificate. <https://academics.pnw.edu/business/forensic-accounting-fraud-investigation/>
- f. Georgia Southern University Parker College of Business offers a 12-credit Forensic Accounting Certificate. <https://parker.georgiasouthern.edu/soa/forensic-certificate/>

7. **Projected Enrollment**

It is projected that most of the enrollment in the program will be from Michigan Tech students who have completed nine credits of undergraduate accounting (Financial Accounting, Managerial Accounting, & Intermediate Accounting). This is because one of the required courses in the proposed certificate, ACC 4100 – Audit & Assurance, requires Intermediate Accounting as a pre/co-requisite. Analysis of prior years' student profiles suggest the majority of students satisfying this nine-credit sequence will be 1) students who have earned undergraduate degrees from the College of Business, Mathematical Sciences, and Scientific & Technical Communication (who

will hopefully then transition in to the MSA program) and 2) the majority of students enrolled in the Master of Science in Accounting (MSA) program.

Fall 2019 -	10 students
Fall 2020 -	12 students
Fall 2021 -	15 students
Fall 2022 -	18 students
Fall 2023 -	20 students

8. Scheduling Plans

The coursework will be offered during regular instructional time periods and will not require changes to scheduling of classes.

9. Curriculum Design

Required Coursework – 6 credits

- ACC 4100 - Audit & Assurance
- ACC 5100 - Advanced Audit & Forensic Examination

Elective Coursework – 3 credits

- BA 5200 - Information Systems Management & Data Analytics OR
- MA 5701 - Statistical Methods OR
- MA 5781 - Time Series Analysis & Forecasting

10. Course Descriptions

Course Descriptions for each respective course are as follows:

ACC 4100 - Audit and Assurance

Auditing procedures and techniques associated with public accounting and with internal auditing for business entities. Topics include auditor's responsibilities, professional ethics, generally accepted auditing standards, purpose and types of audits, objectives, internal control, evidence, organization within the public accounting profession, the audit program, and auditing procedures and techniques.

ACC 5100 - Advanced Auditing and Fraud Examination

An in-depth study of auditing with a focus on fraud examination from an external auditor's perspective. The course utilizes problems, cases, and projects relating to fraud examination and forensic accounting.

BA 5200 - Information Systems Management and Data Analytics

Focuses on management of IS/IT within the business environment. Topics include IT infrastructure and architecture, organizational impact of innovation, change management, human-machine interaction, and contemporary management issues involving data analytics. Class format includes lecture, group discussion, and integrative case studies.

MA 5701 - Statistical Methods

Introduction to design, conduct, and analysis of statistical studies, with an introduction to statistical computing and preparation of statistical reports. Topics include design, descriptive, and graphical methods, probability models, parameter estimation and hypothesis testing.

MA 5781 - Time Series Analysis and Forecasting

Statistical modeling and inference for analyzing experimental data that have been observed at different points in time. Topics include models for stationary and non-stationary time series, model specification, parametric estimation, model diagnostics and forecasting, seasonal models and time series regression models.

Students pursuing the Certificate in Forensic Accounting will work with their advisors to choose the best elective course, given area of interest and prior coursework.

11. Model Schedule Demonstrating Completion Time

The Certificate is designed to be completed over a two-semester sequence.

Fall Semester

Spring Semester

ACC 4100 Audit & Assurance

ACC 5100 Advanced Audit & Forensic Exam

Students will complete the Certificate requirements through taking the elective course in either Fall (MA 5701) or Spring (BUS 5200 or MA 5781) semester.

At this time, the Certificate will be completed on-campus. The SBE is exploring utilization of a synchronous classroom that would allow for a distance learning opportunity in the future.

12. Library and Other Learning Resources

No new library or other learning resources will be required by the MSA program

13. Faculty Resumes

The College of Business has the following faculty members in the accounting program:

Robert Hutchinson, Professor

Sheila Milligan, Senior Lecturer – Richard and Joyce Ten Haken Faculty Fellow

Joel Tuoriniemi, Professor of Practice – Ed & Betty Robinson Faculty Fellow

Jun Dai, Assistant Professor (joining January 2020)

Curriculum Vitae can be found at <https://www.mtu.edu/business/people-groups/faculty-staff/>. Dr. Jun Dai's CV is attached hereto.

The College of Business is also searching for an additional faculty member with an anticipated start date of Fall 2020. Finalists for the position are scheduled for on campus visits during September 2019.

14. Equipment

No additional equipment will be required.

15. Program Costs

No additional costs are anticipated. Current faculty resources would support enrollment growth to 75 students (at a 15:1 ratio). Charges for any software not provided through gratuitous educational licenses can be recovered through appropriate course lab fees.

16. Space

No additional space will be required.

17. Policies, Regulations, and Rules

Not Applicable

18. Accreditation Requirements

The College of Business is accredited by the AACSB. Adding this certificate program will not result in any change to accreditation requirements. The Certificate in Forensic Accounting will automatically become subject to periodic review along with all other degree programs within the College of Business.

19. Planned Implementation Date

Fall 2020

20. Assessment

Program Educational Outcomes:

Three (1-3 below) of the learning objectives in the certificate program are adopted from the American Institute of Certified Public Accountants ([AICPA](#)) [Model Curriculum for Forensic Accounting](#). Namely, students completing this program will be able to

1. Navigate the ethical and legal environment and fulfill the responsibilities of a forensic accountant;
2. Demonstrate core forensic knowledge;
3. Demonstrate competency in forensic accounting in specific engagement settings including fraud, bankruptcy, digital forensics, matrimonial disputes, financial statement misrepresentation, damages and valuation; and

The Certificate program will also include a fourth Learning Objective centered on client communication:

4. Communicate effectively with clients.

An overview of Learning Objectives and potential courses for where the assessment will occur is as follows:

Educational Outcome	COURSE
Fulfill the responsibilities of a forensic accountant	ACC 4100 ACC 5100
Demonstrate core forensic knowledge	ACC 5100 BUS 5200/MA 5701/MA 5781
Demonstrate competency in forensic accounting in specific settings	ACC 4100 ACC 5100

<p>Communicate effectively with clients</p>	<p>ACC 4100 ACC 5100</p>
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Review and Approval by SBE Faculty:	March 22, 2019
Review and Approval by SBE Dean:	March 22, 2019
Review by Provost and Deans' Council:	November 8, 2019
Review and Approval by Graduate Faculty Council:	November 5, 2019
Review by Senate Curricular Policy Committee:	November 11, 2019
Introduced to Senate:	
Approved by Senate:	
Approved by Provost & President:	