N. C. STATE UNIVERSITY
GRADUATE CERTIFICATE PROGRAM FORM

COLLEGE/DEPARTMENT/PROGRAM NAME:
Poole College of Management
DEPARTMENT/PROGRAM NAME: Accounting
CERTIFICATE TITLE: Graduate Certificate in Tax Analytics and Technology

TYPE OF PROPOSAL:
New: ☑
Revision: □
Discontinuation: □

CIP DISCIPLINE#: 52.0301

CERTIFICATE TYPE: On-campus ☒ Distance X On-campus & Distance □

PROPOSED OR CURRENT PROGRAM CODE: by Graduate School

PROPOSED EFFECTIVE DATE: August 2017 APPROVED EFFECTIVE DATE:

GRADUATE CATALOG DESCRIPTION
The Graduate Certificate in Tax Analytics and Technology is a one to two year program that targets for enrollment graduate students at NC State and working professionals in the Research Triangle, national and global community. They will learn knowledge and skills to extract, manipulate, analyze, and summarize tax data to solve tax problems, identify opportunities for tax savings, and to effectively communicate actionable tax and business strategies to organizations.

PROJECTED ENROLLMENT
On campus
Yr 1 0 Yr 2 0 Yr 3 0 Yr 4 0
Distance Education Yr 1 10 Yr 2 15 Yr 3 20 Yr 4 25

PROGRAM COORDINATOR: Jennie Dirienzo

Attachments:
☑ 1. Graduate Certificate Proposal
☑ 2. Statement on Other Departments Likely to be Affected and Summary of Consultations with those Departments – N/A - NO OTHER DEPARTMENTS WILL BE AFFECTED
GRADUATE CERTIFICATE PROPOSAL

The Poole College of Management proposes the creation of a Graduate Certificate in Tax Analytics and Technology. The certificate program is designed to provide access to graduate training in tax analytics and technology to all graduate students with basic tax and accounting knowledge, as well as individuals in the local and national tax community with baccalaureate degrees.

The program supports the goals of NC State’s strategic plan:

1. Enhance student success: Improved understanding of tax analytics and technology will provide students with a solutions-driven approach and allow the opportunity to put ideas to work in the real world
2. Invest in faculty: Expanded opportunities to engage with graduate students will allow us to attract and retain research-oriented faculty
3. Support interdisciplinary scholarship: The certificate program will encourage students from other colleges to take more courses in tax analytics and technology
4. Pursue organizational excellence: The certificate will allow us to offer these courses to our MAC students which will increase our efficiency and enhance the distinctiveness of the MAC program
5. Engage locally and globally: Advanced training in tax analytics and technology should be valuable to many regional, national and global companies

Description:
The Graduate Certificate in Tax Analytics and Technology offers the enrolled students an opportunity to learn about IT tools, enterprise systems, and data analysis in a tax context. The certificate covers a full range of tax and technology topics, with an emphasis on analytics, forecasting, data management, ERP systems, and data security.

Who should enroll
Enrollment is open to the following:
i) All full-time, part-time and on-line MAC students who wish to signal their tax analytics and technology expertise to the job marketplace
ii) Graduate students outside the Jenkins MAC program with basic tax and accounting knowledge who may want to learn tax analytics and technology, and improve their attractiveness to potential recruiters,
iii) Professional accountants who desire in-depth knowledge and skills in tax analytics and technology
iv) Lifelong education students with basic tax and accounting knowledge who would benefit from training in tax analytics and technology

Benefits to enrolled students
i) Learn about the latest analytical and data management tools and techniques
ii) Learn how to apply these tools and techniques to actual tax and business situations, using real companies - real data
iii) Learn from seasoned Accounting faculty, many of whom have Ph.D.s from top business schools such as Arizona State, Texas, Florida State, UNC-CH, Tennessee and South Carolina.

iv) Learn in an interactive online class setting that fosters an intellectually stimulating environment

v) Improve prospects for employment or career advancement

vi) Networking opportunities with other business students/executives enrolled in the program

**Tuition Structure**

We would like to have a flat, premium (off-model) tuition structure for this program. We expect national and global companies will be sponsoring students in the program and we would like them to be able to utilize the same fee structure whether the student lives inside and outside North Carolina. Students in this certificate program will not be eligible for Federal financial aid.

**Program Structure**

*Management* The program will be housed in the Poole College of Management for administrative purposes. The coordinator will be Jennie Dirienzo.

*Curriculum* Students must complete twelve hours of courses with grades of B– or better in every course. Each course is for one credit hour. This program is currently being piloted through Executive Education to a target market of tax professionals working within the business community and public accounting. Given that much of our target market for the certificate will be working professionals, it was determined that offering one credit hour courses allowed them to better fit them into their busy work schedule. Additionally, the subjects tend to stand alone well and combining them in to a series of three credit hour courses was not optimal.

**Required courses**

- ACC 560 Tools for Tax Analytics
- ACC 561 Database Management in Tax
- ACC 562 Forecasting Effective Tax Rates and Scenario Analysis – Introduction
- ACC 563 Forecasting Effective Tax Rates and Scenario Analysis – Advanced Application
- ACC 564 Project Management and Process Documentation in Tax
- ACC 565 Visual Analytics in Tax
- ACC 566 Database Management Applications in Tax
- ACC 567 Enterprise Resource Planning for Tax
- ACC 568 Analysis of Unstructured Data in Tax
- ACC 569 Advanced Visual Analytics in Tax
- ACC 570 Data Security and Warehousing in Tax
- ACC 571 Enterprise Resource Planning – Advanced Topics

**Admission requirements:** Graduate students at NC State must be in good standing and must submit an application to the certificate program that will be reviewed and approved by the coordinator. Students not attending NC State must have completed a baccalaureate degree. A minimum GPA of 3.0 in undergraduate and graduate work combined is required for admission to the program. Those with less than a 3.0 may be admitted provisionally. Provisionally admitted students must initially take ACC 560 and ACC 561 and earn a grade of B (3.0) or better in each course.

**Application and Completion Processes:**
1. An application for acceptance into a certificate program is required for all new applicants. The applicant must apply via the Graduate School application, found at https://www.ncsu.edu/grad/applygrad.htm

2. Those applicants who are currently enrolled in an NC State graduate program need only provide the Graduate Student Certificate Plan Data Entry form, found at https://grad.ncsu.edu/wp-content/uploads/2015/12/grad-cert-plan-data-entry.pdf

3. Applications from individuals not already enrolled at NC State will be reviewed at the department/program level and will pay a $25 fee.

Each semester, students should contact the Certificate Coordinator to determine registration procedures, course availability and registration dates.

When all certificate coursework is satisfactorily completed, the Certificate Coordinator forwards appropriate information to the Director of Graduate programs for the Poole College of Management who then notifies the Graduate School.

**Standards for the certificate:** Students must complete the required credit hours with a 3.000 GPA in all certificate courses. Credit toward the certificate in a particular course will be received only if a grade of B- or better is earned in the course. All courses in the program must be taken for a letter grade. No transfer credits will be accepted in the program and it must be completed within three years. This particular certificate requires twelve (12) credit hours.

**Relationship to MAC admission:** Applicants will be notified in all applications and promotional materials that “Academic success might have a strong bearing on admission to a degree program BUT completion of a certificate program in no way guarantees entry into a graduate degree program, which is done through a separate application process.”

**Responsibility for Administration and Resources**
This certificate program will reside in the Department of Accounting in the Poole College of Management. The certificate coordinator will be a graduate faculty member from that department. Initially the coordinator will be Jennie Dirienzo. Existing resources will be used to support the administration of this program.

The certificate coordinator will

- Make all admission recommendations to the certificate program
- Notify the Dean of the Graduate School of the student's completion of certificate requirements.
- Function as liaison with academic departments and the Graduate School
- Convene faculty as needed to review the program and discuss possible changes in admission requirements and curriculum
Program or Policy Changes for this Certificate
Changes in the graduate certificate program will be determined by the faculty and channeled through the appropriate departmental/college committees. Changes will be submitted for approval to the Administrative Board of the Graduate School.

Learning assessment
1) Students who complete the Graduate Certificate in Tax Analytics and Technology will be able to:
   1. Identify, extract and transform data from a variety of sources for use in developing tax solutions and planning strategies utilizing differing technologies
   2. Create visually appealing and effective tax focused visualizations and dashboards to support decision making and communication with decision makers
   3. Apply project management and process documentation skills within the context of an income tax provision redesign
   4. Access significant amounts of text data for utilization in tax data analytics to demonstrate its power and importance
   5. Evaluate tax data warehousing alternatives, the role of the Cloud and the importance of tax data security
<table>
<thead>
<tr>
<th>Outcome</th>
<th>Evidence</th>
<th>Source</th>
<th>When?</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 Above</td>
<td>Analysis of the assignments imbedded in each of ACC 560, 561, 562, 563, 566, 567, &amp; 571 to ensure that students utilize the different technologies to identify, extract and transform tax data</td>
<td>Student</td>
<td>Throughout the course</td>
</tr>
<tr>
<td>#2 Above</td>
<td>Analysis of the assignments imbedded in each of ACC 565 &amp; 569 to ensure that students create visually appealing and effective tax-focused visualizations</td>
<td>Student</td>
<td>Throughout the course</td>
</tr>
<tr>
<td>#3 Above</td>
<td>Analysis of the assignments imbedded in ACC 564 to ensure that students correctly apply project management and process documentation skills</td>
<td>Student</td>
<td>Throughout the course</td>
</tr>
<tr>
<td>#4 Above</td>
<td>Analysis of the assignments imbedded in ACC 568 to ensure that students access significant amounts of text data for utilization in tax data analytics and demonstrate the power and importance of the analytics</td>
<td>Student</td>
<td>Throughout the course</td>
</tr>
<tr>
<td>#5 Above</td>
<td>Analysis of the assignments imbedded in ACC 570 to ensure that students appropriately evaluate tax data warehousing alternatives, the role of the Cloud and the importance of tax data security</td>
<td>Student</td>
<td>Throughout the course</td>
</tr>
</tbody>
</table>

2) At the time they complete this certificate program, graduates are expected to
- be satisfied with the usefulness of the certificate program in enabling them to achieve their professional goals
- be sufficiently satisfied with the certificate program to recommend it to others with the same professional goals
- be satisfied with the appropriateness of the courses in providing the knowledge or training they anticipate needing for their professional goals
- be satisfied with the frequency and timeliness of the courses offered for the certificate
- be satisfied with the quality of teaching in certificate courses
- be satisfied with the overall educational experience of the certificate program

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Evidence to be Collected</th>
<th>Source of Evidence</th>
<th>Frequency of Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be satisfied with the usefulness of the certificate program in enabling them to achieve their professional goals</td>
<td>Exit survey administered by the Graduate School</td>
<td>Students</td>
<td>Upon Certificate Completion</td>
</tr>
<tr>
<td>To be sufficiently satisfied with the certificate program to recommend it to others with the same professional goals</td>
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Budget

Unless a student is already enrolled in another graduate degree program at NC State, premium tuition will be charged based on the tuition schedule for MBA students. Projected revenue will be as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>$180,000</td>
</tr>
<tr>
<td>Year 2</td>
<td>$270,000</td>
</tr>
<tr>
<td>Year 3</td>
<td>$360,000</td>
</tr>
<tr>
<td>Year 4</td>
<td>$450,000</td>
</tr>
</tbody>
</table>

Major expenses will be program overhead.
Tax Analysis and Technology Certificate
North Carolina State University

This request has been reviewed and approved by the appropriate campus committees and authorities.

Endorsed By:

[Signature]
Head, Department/Director of Graduate Program (Printed Name and Signature) 4/18/17

Recommended By:

[Signature]
Chair, College Graduate Studies Committee (Printed Name and Signature) 4/18/17

Endorsed By:

[Signature]
College Dean (Printed Name and Signature) 4/18/17

Recommended By:

[Signature]
Vice Provost, DELTA (if DE degree) (Printed Name and Signature) 4/24/17

Approved By:

[Signature]
Dean of the Graduate School (Printed Name and Signature) 5/24/17

Recommended By:

[Signature]
Dean's Council (Printed Name and Signature) 4/24/17

Approved By:

[Signature]
Executive Vice Chancellor and Provost (Printed Name and Signature) 4/26/17

Approved By:

[Signature]
Chancellor (Printed Name and Signature) 6/13/18

(revised August 2015)