

**BOARD OF SUPERVISORS FOR THE
UNIVERSITY OF LOUISIANA SYSTEM**

ACADEMIC AND STUDENT AFFAIRS COMMITTEE

April 20, 2017

Item G.7. **University of Louisiana at Lafayette’s** request for approval of a Proposal for a Master of Science in Informatics degree program.

EXECUTIVE SUMMARY

The University of Louisiana at Lafayette (UL Lafayette) requests approval of a Proposal for a Master of Science (MS) in Informatics. The Letter of Intent was approved by the Board of Supervisors for the University of Louisiana System in June 2015 with subsequent approval by the Board of Regents in December 2015. In accordance with *Regents’ Academic Affairs Policy 2.05*, the graduate-level program proposal was reviewed by an external consultant. Dr. Il-Yeol Song, Professor, The College of Computing & Informatics, Drexel University, was extremely supportive of the proposed program and stated the following in his report: “UL Lafayette’s MS in Informatics will address the current and expected demand for well-prepared computing and information technology professionals across the state, including the Acadiana region.” Suggestions provided by Dr. Song were incorporated into the proposal resulting in a stronger program concept.

The mission and purpose of the proposed program is to educate graduate students in the use of the scientific method for the application of computing and information technologies, as well as the design, maintenance, and adaptation of information systems that solve problems with an understanding of human needs and context. Graduates of the 33-credit-hour program will be trained in the Information Technology (IT) aspect of enterprise computing, regardless of end-user/organization domain or area. Enterprise computing involves all the diverse computing solutions, such as database systems, network, and Web infrastructure, application software, and business processes. The curriculum of the proposed MS is organized as four components: 18 hours of core coursework; 3 hours of elective coursework; 6 hours from either elective coursework or coursework relevant to a course thread; and the thesis (6 hours of thesis research) or non-thesis option (3-hour Special Program course and 3-hour Capstone course). The proposed degree is currently intended to be offered in a traditional, face-to-face delivery method.

The curriculum is sufficiently generalized to allow graduates to find employment, both within and outside Louisiana, with companies such as the recently opened CGI, Perficient, Enquero, GE Capital Technology Center, IBM Baton Rouge, and CenturyLink in Monroe, to name a few. As Lafayette continues to develop into a regional hub for such services and information technology industries, the initial area of focus of the proposed program is the goal of using information in organizations to improve products and services. Students completing the proposed program will be well-prepared for one or more of the following: (1) to pursue a

doctoral program in fields such as Informatics, Information Systems or Information Technology; (2) to pursue middle/upper management positions (e.g., Technology Manager, Chief Information Officer); or (3) to pursue mid-career professional advancement.

According to information provided by Louisiana Economic Development (LED), Louisiana's traditional and emerging industries continue to grow at a healthy rate. These industries include: aerospace, agribusiness, automotive, energy, entertainment & game design; manufacturing; process industries, software development, and water management. Additionally, several key technology companies include IBM, CenturyLink, CGA, Enquero, and Perficient. Not only do these technology companies require computer and information technology solutions which are developed and deployed in Informatics professionals, but so-called non-technology companies (e.g., Bell Helicopters, Benteler, ConAgra Foods, and others) also do. Letters of support submitted by many of these companies indicate strong support of the proposed program since it will offer courses aligned with industry need, incorporate industry relevant technologies and software development methodologies into course design, and provide for industry internships and capstones opportunities.

In regards to current program offerings in the State by public universities, there are several Masters-level degree programs in the area of Computer and Information Sciences. These programs are aligned with particular areas of computer science, information systems, and computing technology. In contrast to these existing programs, the program proposed by UL Lafayette is a multi-disciplinary field of science that involves the study and use of computational thinking as applied to user-centered structure, behavior, and interactions of natural and artificial systems (technics) that store, process, and communicate information. Information sciences, human-computer interaction, and information architecture and management, are among the areas of study in Informatics. The proposed MS is not intended to replace, mimic, detract from, or compete with existing programs. UL Lafayette views the proposed program as one that will complement existing programs and one that will enhance both the quality and quantity of trained people in both core and applied Computer/IT areas.

A strong student base will come from existing programs at UL Lafayette, especially undergraduate students majoring in Informatics. A survey of senior undergraduate students majoring in Informatics was conducted in February 2015. Of the 22 respondents, 20 (91%) indicated an interest in pursuing a program like the one proposed. The University projects an enrollment of 10 students in Year One with that number increasing to 28 by Year Five.

The proposed program will be housed within the Ray P. Authement College of Sciences. Existing infrastructure, library holdings, and related equipment are adequate to meet anticipated need. Sufficient faculty are in place to provide instructional support. The proposed program can be fully implemented with little new cost to UL Lafayette as there will be no new additional funds required for supplies, operating expenses, or travel. Cost incurred for graduate assistants and adjunct faculty represent a minimal but necessary investment and will be matched by industry-supported internships and offset by tuition revenue.

By capitalizing upon existing resources, UL Lafayette will be able to offer a program that has been designed to address industry needs at minimal cost. The proposed program will directly support the computing and information technology needs and requirements of key companies that have recently established facilities in the Acadiana region, as well as across the state.

RECOMMENDATION

It is recommended that the following resolution be adopted:

***NOW, THEREFORE, BE IT RESOLVED,** that the Board of Supervisors for the University of Louisiana System hereby approves University of Louisiana at Lafayette's request for approval of a Proposal for a Master of Science in Informatics degree program.*