## PUBLIC

# NEW PROGRAM PROPOSAL FOR ROUTINE REVIEW 

When finished, please save and email to: he.academicprogramactions@dhe.mo.gov
Sponsoring Institution: Drury University
Program Title: Computer Science-Software Engineering
Degree/Certificate: BS-Bachelor of Science
If other, please list
Options: Click here to enter text
Delivery Site: Main Campus-Springfield, MO
CIP Classification: 140903
Implementation Date: 6/1/2016
Is this a new off-site location? $\square$ Yes $\boxtimes$ No
If yes, is the new location within your institution's current CBHE-approved service region?
*If no, public institutions should consult the comprehensive review process

Is this a collaborative program? $\square$ Yes $\boxtimes$ No
*If yes, please complete the collaborative programs form on last page.

Please list similar or comparable programs at Missouri public institutions of higher education.
*For public institutions only

## Click here to enter text

## CERTIFICATIONS:

The program is within the institution's CBHE approved mission. (public only)The program will be offered within the institution's CBHE approved service region. (public only)The program builds upon existing programs and faculty expertiseThe program does not unnecessarily duplicate an existing program in the geographically-applicable area.The program can be launched with minimal expense and falls within the institution's current operating budget. (public only)
## AUTHORIZATION

| Justin Leinaweaver, Director-Institutional Research <br> and Effectiveness | Justin Leinaweaver | $6 / 18 / 2018$ |
| :--- | :---: | :---: |
| Name/Title of Institutional Officer | Signature | Date |

## PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

Although all of the following guidelines may not be applicable to the proposed program, please carefully consider the elements in each area and respond as completely as possible in the format below.

Quantification of performance goals should be included wherever possible.

## 1. Student Preparation

- Any special admissions procedures or student qualifications required for this program which exceed regular university admissions, standards, e.g., ACT score, completion of core curriculum, portfolio, personal interview, etc. Please note if no special preparation will be required.
Click here to enter text
- Characteristics of a specific population to be served, if applicable.

Click here to enter text

## 2. Faculty Characteristics

- Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate. Click here to enter text
- Estimated percentage of credit hours that will be assigned to full time faculty. Please use the term "full time faculty" (and not FTE) in your descriptions here.
Click here to enter text
- Expectations for professional activities, special student contact, teaching/learning innovation.

Click here to enter text

## 3. Enrollment Projections

- Student FTE majoring in program by the end of five years. Click here to enter text
- Percent of full time and part time enrollment by the end of five years.

Click here to enter text
STUDENT ENROLLMENT PROJECTIONS

| YEAR | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Full Time |  |  |  |  |  |
| Part Time |  |  |  |  |  |
| Total |  |  |  |  |  |

## 4. Student and Program Outcomes

- Number of graduates per annum at three and five years after implementation.


## Click here to enter text

- Special skills specific to the program.

Click here to enter text

- Proportion of students who will achieve licensing, certification, or registration.


## Click here to enter text

- Performance on national and/or local assessments, e.g., percent of students scoring above the 50th percentile on normed tests; percent of students achieving minimal cut-scores on criterion-referenced tests. Include expected results on assessments of general education and on exit assessments in a particular discipline as well as the name of any nationally recognized assessments used.
Click here to enter text
- Placement rates in related fields, in other fields, unemployed.


## Click here to enter text

- Transfer rates, continuous study.

Click here to enter text

## 5. Program Accreditation

- Institutional plans for accreditation, if applicable, including accrediting agency and timeline. If there are no plans to seek specialized accreditation, please provide rationale.
Click here to enter text


## 6. Program Structure

A. Total credits required for graduation: 124
B. Residency requirements, if any:

The last 30 hours of a degree must be completed at Drury.
C. General education: Total credits:

Minimum of 44 hours

## Courses (specific courses OR distribution area and credits)

1. Common requirements include the following:

CORE-101: The Drury Seminar (3 hours)
Drury Foundations (3 hours)
CORE 103: Drury Explorations (0 hours)
Transfer Students: CORE 104: Drury By Design (0 hours)
CORE-201: Global Foundations (3 hours)
Ethical Foundations (3 hours)
Foreign Language (6 hours)
EXSP-220: Personal Wellness (2 hours) or BIOL 302: Human Nutrition (3 hours)
Writing in the Major (fulfilled through the major)
Engaged Learning (2 experiences)
2. Divisional Requirements include the following:

Six credit hours in the Social Sciences (three in Human Behavior; three in Institutions and Organizations)
Six credit hours in the Fine Arts (three in Interpretation; three in Invention)
Six credit hours in Science and Math (three in Science and Discovery; three in Exploring Mathematics)
Six credit hours in Humanities

## D. Major requirements: Total credits: 52 credit hours

CSCl 241 Discrete Mathematics 3 hrs.
CSCI 251
CSCI 261
CSCI 262
CSCI 277
CSCI 351
CSCI 355
CSCI 371
CSCI 495
CSCI 496
Introduction to Computer Science
Data Structures 4 hrs .
Algorithms 3 hs .
Algorithms 3 hrs .
Web and Mobile Application Development 3 hrs .
Programming Languages
3 hrs .
Database
3 hrs.
Software Engineering
3 hrs.
Research and Development I
Research and Development II
3 hrs .
3 hrs .
Choose One:
CSCI 331 Operating Systems 3 hrs.
CSCI 361 Computer Organization
3 hrs .
Choose One:
CSCl 453 Formal Language Theory 3 hrs
CSCI 454 Compiler Theory 3 hrs

| Support Courses: Total Hours: 8 |  |  |
| :--- | :--- | :--- |
| MATH 231 | Calculus I | 4 hrs. |
| MATH 232 | Calculus II | 4 hrs. |

E. Free elective credits: 28 credit hours
(sum of $C, D$, and $E$ should equal $A$ )
F. Requirements for thesis, internship or other capstone experience:

Click here to enter text
G. Any unique features such as interdepartmental cooperation:

Click here to enter text
7. Need/Demand
$\square$ Student demand
$\square$ Market demand
$\square$ Societal demand
$\square \mathrm{I}$ hereby certify that the institution has conducted research on the feasibility of the proposal and it is likely the program will be successful.

On July 1, 2011, the Coordinating Board for Higher Education began provisionally approving all new programs with a subsequent review and consideration for full approval after five years.

## COLLABORATIVE PROGRAMS

- Sponsoring Institution One: Choose an institution
- Sponsoring Institution Two: Choose an institution
- Other Collaborative Institutions:
- Length of Agreement: Click here to enter text
- Which institution(s) will have degree-granting authority? Click here to enter text
- Which institution(s) will have the authority for faculty hiring, course assignment, evaluation and reappointment decisions? Click here to enter text
- What agreements exist to ensure that faculty from all participating institutions will be involved in decisions about the curriculum, admissions standards, exit requirements?
Click here to enter text
- Which institution(s) will be responsible for academic and student-support services, e.g., registration, advising, library, academic assistance, financial aid, etc.?
Click here to enter text
- What agreements exist to ensure that the academic calendars of the participating institutions have been aligned as needed?
Click here to enter text

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