

LSC Use Only Proposal No:	UWUCC Use Only Proposal No: 11-124L	Senate Action Date: App- 5/01/12
LSC Action-Date: App-3/22/12	UWUCC Action-Date: App-4/3/12	

Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

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Proposing Department/Unit Computer Science	Phone 7-4478

Check all appropriate lines and complete all information. Use a separate cover sheet for each course proposal and/or program proposal.

1. Course Proposals (check all that apply)

New Course Course Prefix Change Course Deletion
 Course Revision Course Number and/or Title Change Catalog Description Change

Current course prefix, number and full title: **COSC 493 Internship in Computer Science**

Proposed course prefix, number and full title, if changing:

2. Liberal Studies Course Designations, as appropriate
 This course is also proposed as a Liberal Studies Course (please mark the appropriate categories below)

Learning Skills Knowledge Area Global and Multicultural Awareness Writing Across the Curriculum (W Course)
 Liberal Studies Elective (please mark the designation(s) that applies – must meet at least one)

Global Citizenship Information Literacy Oral Communication
 Quantitative Reasoning Scientific Literacy Technological Literacy

3. Other Designations, as appropriate

Honors College Course Other: (e.g. Women's Studies, Pan African)

4. Program Proposals

Catalog Description Change Program Revision Program Title Change New Track
 New Degree Program New Minor Program Liberal Studies Requirement Changes Other

Current program name:

Proposed program name, if changing:

5. Approvals	Signature	Date
Department Curriculum Committee Chair(s)	<i>T. Smith</i>	2/6/12
Department Chairperson(s)	<i>Wm. Ogburn</i>	2/10/2012
College Curriculum Committee Chair	<i>Anne Rando</i>	3/7/12
College Dean	<i>Gene Syff</i>	3/12/12
Director of Liberal Studies (as needed)	<i>Pat H. H. H.</i>	3/22/12
Director of Honors College (as needed)		
Provost (as needed)		
Additional signature (with title) as appropriate		
UWUCC Co-Chairs	<i>Gail Sedquist</i>	4/24/12

Received
APR 24 2012
Liberal Studies

Received
MAR 12 2012
Liberal Studies

Part II. Description of Curriculum Change

1. Syllabus of Record

I. CATALOG DESCRIPTION

COSC 493 Internship in Computer Science

var-6-12cr

Prerequisites: COSC 105, 220 (except Languages and Systems track), 300, 310, 319, 341, 380, other courses depending on type of internship position desired, completion of application, and selection by a faculty committee. COSC 319, COSC 341, and COSC 380 prerequisite may be waived when registering for first 6cr.

Positions with participating companies provide students with paid experience in Computer Science under supervision of the companies and faculty. Requirements include three on-site consultations (one during first 6cr and two in final 6cr), two university consultations (one during first 6cr and one in final 6cr), completion of progress reports, oral presentation (final 6cr only), and a final cumulative paper (final 6cr only). An internship is offered only to students who have completed their sophomore year. No more than 3cr of the first 6cr of COSC 493 and 3cr of the last 6cr of COSC 493 may be applied toward the credit hour requirement for a major in Computer Science. Internship can be completed as one 12cr unit over a minimum of 23 weeks or in 6cr units each over a minimum of 12 weeks. (Writing-intensive course. As such, an internship requires completion of designated writing-intensive components.)

II. COURSE OUTCOMES

Upon successful completion of this course, students will be able to:

1. Apply what they have learned in the classroom to the corporate setting and to make professional contributions to the organization in which the student is placed.
2. Explain concepts in the computing field that are difficult to teach in the classroom, such as user interaction, testing, and software configuration management.
3. Experience the business and industrial environment in which a computer professional must learn to function.
4. Assess his/her professional, emotional, social and intellectual growth
5. Organize career goals and formulate course selection to attain those goals.
6. Develop writing skills that are necessary in the professional world of computing.

III. COURSE REQUIREMENTS AND PROCEDURES

In Order To Be Considered and Approved For An Internship:

1. The student must have completed or enrolled at the time of application in the following courses: COSC 105, COSC 110, COSC 210, COSC 220 (except L&S track), COSC 300, COSC 310, COSC 319, COSC 341, and COSC 380. A student preparing for a specialized area of computer work may offer a different set of courses than those listed above provided a suitable internship is available. Such cases will be decided individually. COSC 319, COSC 341, and COSC 380 prerequisite may be waived when registering for the only the first 6cr.
2. To be approved unconditionally, a student must have an overall GPA of 2.75 or better and a GPA in Computer Science courses of 3.0 or better and meet the other requirements fully. To be conditional the student must have an overall GPA of 2.5 or better and a GPA in Computer Science courses of 2.5 or better and have met the other requirements with the possible omission of not more than one of the courses listed in requirement 1. Internship candidates will be identified by program, coursework completed, and academic record; then presented to potential employers. Information provided to potential employers will include the unconditional/conditional designation. Other students will not be eligible for an internship.

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3. The student who is applying must have completed or be enrolled in a total of 60 credits or more.
4. The student must complete an Application for Internship and submit this with an appropriate resume.
5. The student must be approved by the Computer Science Faculty.

Approval by Computer Science Faculty does not guarantee placement. Enrollment in internship is subject to successful placement at a participating company. For students electing to complete an internship in two 6 credit hour units, there is no guarantee to be placed at the same company for both units.

While on an Internship

1. The student must work a normal work week (usually 40 hours) for a minimum of 23 consecutive weeks when registered for 12cr (12 consecutive weeks when registered for 6cr).
2. The amount the student is paid should be at least seventy-five percent of the salary paid by the employer to an entry-level programmer/analyst, but no less than one hundred-fifty percent of the current minimum wage.
3. The student must host the university supervisor at three on-site visits (one during first 6cr and two in final 6cr) and come back to campus twice (one during first 6cr and one in final 6cr) for a campus visit. If the site is over 300 miles away, then phone calls and/or emails may be substituted for one university supervisor visit and one campus visit.
4. The student must keep a Daily Log of the internship experience including work assignments and learning experiences.
5. Upon completion of 12cr, the student must write a comprehensive paper which details the complete internship experience.

If registered for only the first 6cr, the student must produce an outline of the internship experience for the first unit. The outline is to be incorporated into the comprehensive paper on completing the final 6cr.

6. Upon completion of 12cr, the student must make a professional oral presentation of the internship experience.
7. The student must maintain a writing portfolio that contains copies of all writing done including business letters, memos, and software documentation.

After Completing 6cr of Internship (either as a 6 credits or 12 credits)

1. The student must be enrolled at IUP as a full time student the semester immediately after an internship experience.
2. During the semester immediately following the internship the student must successfully complete a Computer Science elective course.

The semester must be completed as prescribed in order to fulfill the COSC 473 or COSC 493 requirement for graduation. This may be waived with approval of the Computer Science Department Chair.

Special Features of the Computer Science Internship Program:

1. All internships are paid at least seventy-five percent of the salary paid by the employer to an entry-level programmer/analyst, but no less than one hundred-fifty percent of the current minimum wage.
2. The internship is for a minimum of 23 weeks for 12cr (or 12 weeks for 6cr).
3. The student applies to the Computer Science Department and the department places them. (Student may supply the department with leads for an internship site and may then be the primary candidate for that site)

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4. A formal presentation of the internship is given at the end of 12cr to faculty and students on campus. Company representatives and family are invited to attend
5. The student receives 6 to 12cr for the internship work and is graded using the normal grading system.
6. Only completion of 12cr fulfills COSC 473 or COSC 493 requirement.
7. Only completion of 12cr fulfills the liberal studies writing intensive requirement.

IV. EVALUATION METHODS

The final grade for the course will be determined as follows:

One 12 Cr Unit	or	First 6 Cr Unit	Second 6 Cr Unit	
5%		10%	N/A	Intern Expectation Paper *
30%		30%	30%	Site visits in consultation with supervisor (includes Intern Log Book)
10%		10%	10%	Writing Portfolio (memos and letters) *
15%		15%	15%	Documentation*
5%		10%	N/A	Resume*
N/A		20%	N/A	Outline
20%		N/A	25%	Final Paper*
10%		N/A	15%	Oral Presentation
5%		5%	5%	Administrative maturity

* designates a writing intensive component.

V. REQUIRED TEXTBOOKS, SUPPLEMENTAL BOOKS AND READINGS

The student normally does not purchase any books, but must read books that include corporate standards manuals, language and software package manuals, reference manuals, users manuals, etc.

VI. SPECIAL RESOURCE REQUIREMENTS

Each student will be required to:

1. Purchase or generate a Daily Log/Internship Booklet
2. Utilize computerized presentation software for the professional oral presentation.

VIII. BIBLIOGRAPHY

Not applicable.

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2. Summary of the Proposed Revisions

Increased the number of credit hours that applied towards major from 2cr out of 6cr of COSC 493 to 3cr out of 6cr of COSC 493. There are no resource implications since the internship will be offered in the same manner as before. The only difference is in the increased number of credits which can be counted toward the major.

Changed the references to COSC 320 to COSC 473.

No other changes were made to the description, outcomes, content, or assessment.

3. Justification/Rationale

Increase in the number of credits enables COSC 493 to count as controlled elective and to meet the practicum requirement of the Applied and Information Assurance tracks. This change is in accordance with proposed changes to all computer science tracks.

Change the reference to COSC 320 is the result of renumbering said course to COSC 473.

4. Old Syllabus of Record

I. CATALOG DESCRIPTION

COSC 493 Internship in Computer Science

var-6-12cr

Prerequisites: COSC 105, COSC 110, COSC 210, COSC 220 (except Languages and Systems track), COSC 300, COSC 310, COSC 319, COSC 341, COSC 380, other courses depending on type of internship position desired, completion of application, and selection by a faculty committee. COSC 319, COSC 341, and COSC 380 prerequisite may be waived when registering for first 6cr.

Positions with participating companies provide students with paid experience in Computer Science under supervision of the companies and faculty. Requirements include three on-site consultations (one during first 6cr and two in final 6cr), two university consultations (one during first 6cr and one in final 6cr), completion of progress reports, oral presentation (final 6cr only), and a final cumulative paper (final 6cr only). An internship is offered only to students who have completed their sophomore year. No more than 2cr of the first 6cr of COSC 493 and 2cr of the last 6cr of COSC 493 may be applied toward the credit hour requirement for a major in Computer Science. Internship can be completed as one 12cr unit over a minimum of 23 weeks or in two 6cr units each over a minimum of 12 weeks. (Writing-intensive course. As such, an internship requires completion of designated writing-intensive components.)

II. COURSE OUTCOMES

Upon successful completion of this course, students will be able to:

1. Apply what they have learned in the classroom to the corporate setting and to make professional contributions to the organization in which the student is placed.
2. Learn concepts in the computing field that are difficult to teach in the classroom, such as user interaction, testing, and software configuration management.
3. Experience the business and industrial environment in which a computer professional must learn to function.
4. Grow professionally, emotionally, socially and intellectually.
5. Sharpen their focus on career goals and course selection to reach those goals.
6. Develop writing skills that are necessary in the professional world of computing.

III. COURSE REQUIREMENTS AND PROCEDURES

In Order To Be Considered and Approved For An Internship:

1. The student must have completed or enrolled at the time of application in the following courses: COSC 105, COSC 110, COSC 210, COSC 220 (except L&S track), COSC 300, COSC 310, COSC 319, COSC 341, and COSC 380. A student preparing for a specialized area of computer work may offer a different set of courses than those listed above provided a suitable internship is available. Such cases will be decided individually. COSC 319, COSC 341, and COSC 380 prerequisite may be waived when registering for the only the first 6cr.
2. To be approved unconditionally, a student must have an overall GPA of 2.75 or better and a GPA in Computer Science courses of 3.0 or better and meet the other requirements fully. To be conditional the student must have an overall GPA of 2.5 or better and a GPA in Computer Science courses of 2.5 or better and have met the other requirements with the possible omission of not more than one of the courses listed in requirement 1. Internship candidates will be identified by program, coursework completed, and academic record; then presented to potential employers. Information provided to potential employers will include the unconditional/conditional designation. Other students will not be eligible for an internship.
3. The student who is applying must have completed or be enrolled in a total of 57 credits or more.

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4. The student must complete an Application for Internship and submit this with an appropriate resume.
5. The student must be approved by the Computer Science Faculty.

Approval by Computer Science Faculty does not guarantee placement. Enrollment in internship is subject to successful placement at a participating company. For students electing to complete an internship in two 6 credit hour units, there is no guarantee to be placed at the same company for both units.

While on an Internship

1. The student must work a normal work week (usually 40 hours) for a minimum of 23 consecutive weeks when registered for 12cr (12 consecutive weeks when registered for 6cr).
2. The amount the student is paid should be at least seventy-five percent of the salary paid by the employer to an entry-level programmer/analyst, but no less than one hundred-fifty percent of the current minimum wage.
3. The student must host the university supervisor at three on-site visits (one during first 6cr and two in final 6cr) and come back to campus twice (one during first 6cr and one in final 6cr) for a campus visit. If the site is over 300 miles away, then phone calls and/or emails may be substituted for one university supervisor visit and one campus visit.
4. The student must keep a Daily Log of the internship experience including work assignments and learning experiences.
5. Upon completion of 12cr, the student must write a comprehensive paper which details the complete internship experience.

If registered for only the first 6cr, the student must produce an outline of the internship experience for the first unit. The outline is to be incorporated into the comprehensive paper on completing the final 6cr.

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After Completing 6cr of Internship (either as a 6 credits or 12 credits)

1. The student must be enrolled at IUP as a full time student the semester immediately after an internship experience.
2. During the semester immediately following the internship the student must successfully complete a Computer Science elective course.

The semester must be completed as prescribed in order to fulfill the COSC 320 or COSC 493 requirement for graduation. This may be waived with approval of the Computer Science Department Chair.

Special Features of the Computer Science Internship Program:

1. All internships are paid at least seventy-five percent of the salary paid by the employer to an entry-level programmer/analyst, but no less than one hundred-fifty percent of the current minimum wage.
2. The internship is for a minimum of 23 weeks for 12cr (or 12 weeks for each 6cr).
3. The student applies to the Computer Science Department and the department places them. (Student may supply the department with leads for an internship site and may then be the primary candidate for that site.)
4. A formal presentation of the internship is given at the end of 12cr to faculty and students on campus. Company representatives and family are invited to attend.

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5. The student receives 6 to 12 credits for the internship work and is graded using the normal grading system.
6. Only completion of 12cr fulfills COSC 493 or COSC 320 requirement.
7. Only completion of 12cr fulfills liberal studies writing intensive requirement.

IV. EVALUATION METHODS

The final grade for the course will be determined as follows:

One 12 Cr Unit	or	First 6 Cr Unit	Second 6 Cr Unit	
5%		10%	N/A	Intern Expectation Paper *
30%		30%	30%	Site visits in consultation with supervisor (includes Intern Log Book)
10%		10%	10%	Writing Portfolio (memos and letters) *
15%		15%	15%	Documentation*
5%		10%	N/A	Resume*
N/A		20%	N/A	Outline
20%		N/A	25%	Final Paper*
10%		N/A	15%	Oral Presentation
5%		5%	5%	Administrative maturity

* designates a writing intensive component.

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Each student will be required to:

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VIII. BIBLIOGRAPHY

Not applicable.