

Program Information Report

Web Database Programming Professional (CVWDPP)

Advanced Certificate

Program Effective Term: Fall 2016

This program focuses on the development of web databases and e-commerce applications. The coursework emphasizes server-side programming and is intended for students with strong programming background. Students will be exposed to a professional team programming exercise. If a student needs exposure to front-end web development, a certificate in the Web Design and Development discipline should be considered.

Applying for Admission to the Program:

Academic Math Level 4 is required to enroll in CPS 161.

Program Admission Requirements:

Completion of CPS 161 or CPS 171 with a minimum grade of "B-" or instructor consent.

Major/Area Requirements		(16 Credits)
CPS 276	Web Programming Using Apache, MySQL, and PHP	4
CPS 278	Java Server Programming	4
CPS 298	Professional Team Programming	4
CIS 282 or	Database Principles and Application*	3-4
WEB 230	Web Development III	1
	Elective(s) Any 100-level or above course to bring the total credits to a minimum of 16.*	1

Minimum Credits Required for the Program:

16

Notes:

*Students who select CIS 282 must take one (1) additional credit to reach 16 credits.

PROGRAM CHANGE OR DISCONTINUATION FORM

Program Code: **CVWDPR CVWDPP** Program Name: **Web Database Programming Professional** Effective Term: **Fall 2016**
 Division Code: **BCT** Department: **CIS/CPS**

Directions:

1. Attach the current program listing from the WCC catalog or Web site and indicate any changes to be made.
2. Draw lines through any text that should be deleted and write in additions. Extensive narrative changes can be included on a separate sheet.
3. Check the boxes below for each type of change being proposed. Changes to courses, discontinuing a course, or adding new courses as part of the proposed program change, must be approved separately using a Master Syllabus form, but should be submitted at the same time as the program change form.

Requested Changes:

<input type="checkbox"/> Review	<input checked="" type="checkbox"/> Program admission requirements
<input checked="" type="checkbox"/> Remove course(s): _____ see the marked up pages _____	<input type="checkbox"/> Continuing eligibility requirements
<input checked="" type="checkbox"/> Add course(s): _____ see the marked up pages _____	<input type="checkbox"/> Program outcomes
<input checked="" type="checkbox"/> Program title (title was <u>Web Database Programming</u>)	<input type="checkbox"/> Accreditation information
<input checked="" type="checkbox"/> Description	<input type="checkbox"/> Discontinuation (attach program discontinuation plan that includes transition of students and timetable for phasing out courses)
<input type="checkbox"/> Type of award	<input type="checkbox"/> Other _____
<input type="checkbox"/> Advisors	
<input type="checkbox"/> Articulation information	

Show all changes on the attached page from the catalog.

Rationale for proposed changes or discontinuation: *In addition to*
 The Web Database Programming was poorly defined. With the new list of courses, we need to update the description and the title. The new list of courses are cps278, cps276, cps298 and 1 of the 2 courses cis282 or Web 230.

Financial/staffing/equipment/space implications:

List departments that have been consulted regarding their use of this program.

Signatures:

Reviewer	Print Name	Signature	Date
Initiator	Clem Hasselbach	<i>Clem Hasselbach</i>	12/4/2015
Department Chair	John Trame	<i>John Trame</i>	12/7/15
Division Dean/Administrator	Kim Hurns	<i>Kim Hurns</i>	12/15/15
Vice President for Instruction	Michael Nealon	<i>Michael Nealon</i>	2/12/16
President			

Do not write in shaded area. Entered in: Banner 2/2/16 C&A Database Log File Board Approval

Please submit completed form to the Office of Curriculum and Assessment (SC 257).

*done 2/2/16
 logged 12/17/15 by ms
 Office of Curriculum & Assessment*

WASHTENAW COMMUNITY COLLEGE

ACADEMICS

Professional

Web Database Programming (CVWDPR)

Advanced Certificate

2013 - 2014 2014 - 2015 2015 - 2016

Description

This program focuses on the development of Web databases and e-commerce applications. It is intended for students with a strong programming background. The coursework emphasizes server-side programming. CSS and professional HTML are given minimal coverage (students interested in these topics should consider the Web Technology certificate).

Admissions Requirements

Completion of CPS 161 or CPS 171 with a minimum grade of "B-" or instructor consent.

Contact Information

Division: Business/Computer Technologies
Department: Computer Instruction Dept
Advisors: [unclear]

Requirements

(Items marked in *red* are available online.)

Major/Area Requirements

Class	Title	Credits
CPS 276	Web Programming Using Apache, MySQL, and PHP	4
CPS 278	Java Server Programming	4
<i>CPS 298</i>	<i>Professional Team Programming</i>	<i>4</i>
	Select 3 additional classes from the following (not to repeat the choice made above): CIS 282*, CPS 251, CPS 261, CPS 276, CPS 278, CPS 279 or Web 230	12 <i>3-4</i>
	Select one additional elective to meet a minimum of 16 credits if CPS 298	1 <i>1</i>
Total	<i>(5)</i>	16-17 <i>16</i>

hours
Total Credits Required: ~~16-17~~

Out of Programmed Electives

Students must take CPS 276, CPS 278, CPS 298 and one of CIS 282 or WEB 230. Students who select CIS 282 must take one (1) additional credit to reach 16.

1 This program focuses on the development of Web data bases and e-commerce
 ... applications. The coursework emphasizes server-side programming and is
 ... intended for students with a strong programming background. Students will
 ... be exposed to a professional team programming experience. If a student
 ... needs a rigorous exposure to CSS, a course in the Web Design department
 ... should be considered.

front end web development ^{certificate} + Development discipline

CPS 276		4
CPS 278		4
CPS 298		4
CIS 282	}	3-4
or WEB 230		

Select 1 additional 0-1
 Credit if CIS 282 is
 used to reach 16
 credits

16 credits

PROGRAM CHANGE OR DISCONTINUATION FORM

Program Code: CVWDPR

Program Name: Web Database Programming

Effective Term: Fall 2012

Division Code: BCT Department: CISD

Directions:

1. Attach the current program listing from the WCC catalog or Web site and indicate any changes to be made.
2. Draw lines through any text that should be deleted and write in additions. Extensive narrative changes can be included on a separate sheet.
3. Check the boxes below for each type of change being proposed. Changes to courses, discontinuing a course, or adding new courses as part of the proposed program change, must be approved separately using a Master Syllabus form, but should be submitted at the same time as the program change form.

Requested Changes:

- | | |
|---|---|
| <input type="checkbox"/> Review | <input type="checkbox"/> Program admission requirements |
| <input checked="" type="checkbox"/> Remove course(s): CPS 280 _____ | <input type="checkbox"/> Continuing eligibility requirements |
| <input checked="" type="checkbox"/> Add course(s): CPS261 _____ | <input type="checkbox"/> Program outcomes |
| <input type="checkbox"/> Program title (title was _____) | <input type="checkbox"/> Accreditation information |
| <input type="checkbox"/> Description | <input type="checkbox"/> Discontinuation (attach program discontinuation plan that includes transition of students and timetable for phasing out courses) |
| <input type="checkbox"/> Type of award | <input checked="" type="checkbox"/> Other Capstone course change _____ |
| <input type="checkbox"/> Advisors | |
| <input type="checkbox"/> Articulation information | |

Show all changes on the attached page from the catalog.

Rationale for proposed changes or discontinuation:

The CPS280 course was originally going to be the capstone course. This course will not be created due to loss of the key person who was going to develop the course. The proposed restructuring of the program alters the content somewhat, but the focus is still Web Programming using database technology.

The program will effectively have 2 capstone courses (see the new description). So, assessment will be based on assessing both of the capstone courses. CIS282 is a 3 credit class, so if the student chooses CIS282, they will need to take an additional course for a minimum of 1 credit.

Financial/staffing/equipment/space implications:

List departments that have been consulted regarding their use of this program.

Signatures:

Reviewer	Print Name	Signature	Date
Initiator	Clarence Hasselbach	<i>Clarence Hasselbach</i>	2/1/12
Department Chair	Clarence Hasselbach	<i>Clarence Hasselbach</i>	2/1/12
Division Dean/Administrator	Rosemary Wilson	<i>Rosemary Wilson</i>	2/1/12
Vice President for Instruction	Stuart Blacklaw	<i>Stuart Blacklaw</i>	4-5-12
President			

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frank logged 2/1/12 s/v

Program Information Report

School of Information Technology

The School of Information Technology gathers the diverse areas that make up the computer technology of today. From basic programming languages to systems development through networking, these programs provide the core of information technology. Develop skills in computer networking or programming in the growing field of applied information technology.

Washtenaw Community College offers programs at several levels for students who want to begin new careers, or advance in their existing careers. The first level is the certificate, which can vary from nine to thirty-six credits, depending on the field. Certificates generally prepare students for entry-level jobs.

After completing a certificate, students can progress to the next level, the advanced certificate. The credit hours required for these programs also vary. This type of certificate provides a more specialized level of skill development, and often allows students to upgrade their positions at their places of employment.

The next level, an Associate in Applied Science, is available for some programs. For some career fields, it is possible to earn a certificate, advanced certificate, and an Associate in Applied Science degree in the same field. In these cases, the credit hours from the certificate and advanced certificate can be applied to the credit hours needed for the Associate in Applied Science degree.

Alternatively, students can earn an AAS in Occupational Studies by completing a certificate, advanced certificate (if it exists) and General Education requirements.

Programming

Learn the foundation of computer programming or specialize in a programming language through these programs.

Web Database Programming (CVWDPR)

Advanced Certificate

Program Effective Term: Fall 2012

This program focuses on the development of Web databases and e-commerce applications. It is intended for students with a strong programming background. The coursework emphasizes server-side programming. CSS and professional HTML are given minimal coverage (students interested in these topics should consider the Web Technology certificate).

Program Admission Requirements:

Completion of CPS 161 or CPS 171 with a minimum grade of "B-" or instructor consent.

CPS 276 or	Web Programming Using Apache, MySQL, and PHP	
CPS 278	Java Server Programming	4
Elective	Select 3 additional classes from the following (not to repeat the choice made above): CIS 282*, CPS 251, CPS 261, CPS 276, CPS 278, CPS 293	11-12
Elective	Select one additional elective to meet a minimum of 16 credits if CIS 282 is chosen*	1-0

Minimum Credits Required for the Program: 16

PROGRAM PROPOSAL FORM

- Preliminary Approval** – Check here when using this form for preliminary approval of a program proposal, and respond to the items in general terms.
- Final Approval** – Check here when completing this form after the Vice President for Instruction has given preliminary approval to a program proposal. For final approval, complete information must be provided for each item.

<p>Program Name:</p> <p>Division and Department:</p> <p>Type of Award:</p> <p>Effective Term/Year:</p> <p>Initiator:</p>	<p><u>Web Database Programmer certificate</u></p> <p><u>CPS/CIS</u></p> <p><input type="checkbox"/> AA <input type="checkbox"/> AS <input type="checkbox"/> AAS <input type="checkbox"/> Cert. <input checked="" type="checkbox"/> Adv. Cert. <input type="checkbox"/> Post-Assoc. Cert. <input type="checkbox"/> Cert. of Comp.</p> <p><u>Fall 2011</u></p> <p><u>Clarence Hasselbach</u></p>	<p>Program Code:</p> <p><u>CVWDP</u></p> <p>CIP Code:</p> <p><u>11.0202</u></p>
<p>Program Features Program's purpose and its goals. Criteria for entry into the program, along with projected enrollment figures. Connection to other WCC programs, as well as accrediting agencies or professional organizations. Special features of the program.</p>	<p>This program is to provide a strong web and database programming experience for our students. To enter this program, students are expected to have programming experience equivalent to CPS 161 or CPS 171. The purpose of this certificate is to provide students with skills that are used in today's web and database industry.</p> <p>School of Information Technology Sub-school – Programming</p>	
<p>Need Need for the program with evidence to support the stated need.</p>	<p>The current job market values web and database knowledge.</p>	
<p>Program Outcomes/Assessment State the knowledge to be gained, skills to be learned, and attitudes to be developed by students in the program. Include assessment methods that will be used to determine the effectiveness of the program.</p>	<p><u>Outcomes</u></p> <ol style="list-style-type: none"> 1. Identify appropriate use of the SAX and DOM XML parsing algorithms 2. Identify appropriate use of secure connections using Hypertext Transfer Protocol Secure(https) 3. Identify appropriate use of dynamic web data access using AJAX and JQuery 4. Demonstrate sound software engineering techniques in developing a working web database driven shopping cart application using dynamic web data access techniques (AJAX and JQuery) 	<p><u>Assessment method</u></p> <ol style="list-style-type: none"> 1. Assess capstone course (CPS 280)

Please return completed form to the Office of Curriculum & Assessment and email an electronic copy to sjohn@wccnet.edu for posting on the website.

Handwritten: 3/14/11 logged 2/7/11 [signature]

<p>Curriculum</p> <p>List the courses in the program as they should appear in the catalog. List minimum credits required. Include any notes that should appear below the course list.</p>	<p>Required: CPS 280 Advanced Web/Database Programming (Note that CPS 280 has a prerequisite of either CPS 276 or CPS 278)</p> <p>One of: CPS 276 – Web Programming Using Apache, MySQL, and PHP CPS 278 – Java Server Programming</p> <p>Students must take two (2) of the following classes not already selected above: CPS 276 – Web Programming Using Apache, MySQL, and PHP CPS 278 – Java Server Programming CIS 282 – Relational Database Concepts and Application CPS 251 – Android Programming Using Java CPS 293 – C#.Net</p> <p>Minimum 15 Credit Hours</p>																							
<p>Budget</p> <p>Specify program costs in the following areas, per academic year:</p>	<table border="1"> <thead> <tr> <th></th> <th>START-UP COSTS</th> <th>ONGOING COSTS</th> </tr> </thead> <tbody> <tr> <td>Faculty</td> <td>\$.</td> <td>\$.</td> </tr> <tr> <td>Training/Travel</td> <td>.</td> <td>.</td> </tr> <tr> <td>Materials/Resources</td> <td>.</td> <td>.</td> </tr> <tr> <td>Facilities/Equipment</td> <td>.</td> <td>.</td> </tr> <tr> <td>Other</td> <td>.</td> <td>.</td> </tr> <tr> <td>TOTALS:</td> <td>\$.</td> <td>\$.</td> </tr> </tbody> </table>				START-UP COSTS	ONGOING COSTS	Faculty	\$.	\$.	Training/Travel	.	.	Materials/Resources	.	.	Facilities/Equipment	.	.	Other	.	.	TOTALS:	\$.	\$.
	START-UP COSTS	ONGOING COSTS																						
Faculty	\$.	\$.																						
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Facilities/Equipment	.	.																						
Other	.	.																						
TOTALS:	\$.	\$.																						
<p>Program Description for Catalog and Web site</p>	<p>This program focuses on the development of Web databases and e-commerce applications. It is intended for students with a strong programming background. The coursework emphasizes server-side programming. CSS and professional HTML are given minimal coverage (students interested in these topics should consider the Web Technology certificate).</p>																							
<p>Program Information</p>	<p>Accreditation/Licensure -</p> <p>Advisors – Clarence Hasselbach, Khaled Mansour</p> <p>Advisory Committee -</p> <p>Admission requirements - completion of CPS 161 or CPS 171 with a “B-“ or instructor consent</p> <p>Articulation agreements -</p> <p>Continuing eligibility requirements -</p>																							

Assessment plan:

Program outcomes to be assessed	Assessment tool	When assessment will take place	Courses/other populations	Number students to be assessed
Identify appropriate use of the SAX and DOM XML parsing algorithms	Common final for capstone course	Winter 2013	All sections	All students
Identify appropriate use of secure connections using Hypertext Transfer Protocol Secure (https)	Common final for capstone course	Winter 2013	All sections	All students
Identify appropriate use of dynamic web data access using AJAX and JQuery	Common final for capstone course	Winter 2013	All sections	All students
Demonstrate sound software engineering techniques in developing a working web database driven shopping cart application using dynamic web data access techniques (AJAX and JQuery).	Common rubric for capstone course to evaluate class project.	Winter 2013	All sections	All students

Scoring and analysis plan:

1. Indicate how the above assessment(s) will be scored and evaluated (e.g. departmentally developed rubric, external evaluation, other). Attach the rubric.

The first 3 items are evaluated by the final in CPS 280. The last item will be evaluated by the CPS 280 rubric (provided as an attachment).

2. Indicate the standard of success to be used for this assessment.

70% of all students must score at least 70% or better on all learning outcome evaluations.

3. Indicate who will score and analyze the data.

Assessment materials will be analyzed by the CIS department.

4. Explain how and when the assessment results will be used for program improvement.

Based upon the results of the evaluation, if 70% or more of the students score 70% or better, no action will be taken. If less than 70% of the students score more than 70%, then the program will be evaluated.

REVIEWER	PRINT NAME	SIGNATURE	DATE
Department Chair/Area Director	Clarence Hasselbach	<i>Clarence Hasselbach</i>	
Dean	Rosemary Wilson	<i>Rosemary Wilson</i>	2/1/11
Vice President for Instruction <input type="checkbox"/> Approved for Development <input type="checkbox"/> Final Approval	Stuart Blacklaw	<i>Stuart Blacklaw</i>	3/10/11
President <i>LARRY WHEATWORTH</i>		<i>Larry Wheatworth</i>	3/10/11
Board Approval			3/22/11

FW

Program Information Report

School of Information Technology

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Alternatively, students can earn an AAS in Occupational Studies by completing a certificate, advanced certificate and General Education requirements.

Programming

Learn the foundation of computer programming or specialize in a programming language through these programs.

Web Database Programmer (CVWDP)

Advanced Certificate

Program Effective Term: Fall 2011

This program focuses on the development of Web databases and e-commerce applications. It is intended for students with a strong programming background. The coursework emphasizes server-side programming. CSS and professional HTML are given minimal coverage (students interested in these topics should consider the Web Technology certificate).

Program Admission Requirements:

Completion of CPS 161 or CPS 171 with a minimum grade of "B-" or instructor consent.

Major/Area Requirements		(15 credits)
CPS 276 or	Web Programming Using Apache, MySQL, and PHP	4
CPS 278	Java Server Programming	4
CPS 280	Advanced Web/Database Programming	4
	Select two of the following courses not already selected above: CIS 282, CPS 276, CPS 278, CPS 251, CPS 293	7-8

Minimum Credits Required for the Program: 15