Program Information Report

School of Digital Media Arts

Creativity abounds in the School of Digital Media Arts which encompasses the disciplines of animation, graphic design, web design and development, photography and digital video. The programs in Digital Media Arts introduce students to foundational skills in these disciplines and prepare them for creative jobs.

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.

The next level, an Associate Degree, is available for some programs. Credit hours from the certificate can be applied to the credit hours needed for the Associate Degree.

Web Design and Development

Join the Web development industry through the completion of these certificates and degree.

Web Development (CVWDEV)

Advanced Certificate

Program Effective Term: Fall 2014

High Demand Occupation High Skill Occupation High Wage Occupation

This program is designed for students interested in Web application development and programming. Courses focus on the knowledge and skills necessary for creating database-enabled applications, dynamic content, and interactive Web sites.

Articulation:

Eastern Michigan University, BS degree.

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: www.wccnet.edu/departments/curriculum/articulation.php?levelone=colleges.

Program Admission Requirements:

Students must complete the Web Design and Development Certificate or have significant programming and HTML5/CSS3 experience prior to starting this certificate.

Major/Area Ri	quirements	(11 credits)
WEB 230	Web Development III	4
WEB 250	Web Development IV	4
Elective	Any CPS class or CIS 121	3-4

Minimum Credits Required for the Program:

PROGRAM CHANGE OR DISCONTINUATION FORM

Program Code: CVWBDV

Program Name: Web Development

Effective Term: Fall

2014

Division Code: BCT

Department: DMA

DISC: WEB

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:			
□Review □Remove course(s): INP 271, INP 275, INP 276, INP 281, INP 291 □Add course(s): WEB 230, WEB 250, □Program title Web Development Advanced Certificate (title was Web Application Development) □Description □Type of award □Advisors □Articulation information Show all changes on the attached page from the catalog.	□ Program admission requirements □ Continuing eligibility requirements □ Program outcomes □ Accreditation information □ Discontinuation (attach program discontinuation plan that includes transition of students and timetable for phasing out courses) X Other Add to Restricted Electives to Get Program over 9 credits.		
Rationale for proposed changes or discontinuation: Because of the length of our programs and the increasing complexity of the subject matter, student success and completion rates have been below expectations. We are redesigning our programs and this class to provide a more targeted path for completion and allow for a more time on task as they tackle this complicated topic. Our advisory committee and outside industry have worked with us on these changes as well.			
Financial/staffing/equipment/space implications: None			
List departments that have been consulted regarding to WEB, DMA	heir use of this program.		
Clamatanas			

Reviewer	Print Name	Signature / /	Date
Initiator	Scott Shaper	1.11	10/31/2013
Department Chair	Jason Withow	Jason within	11/18/13
Division Dean/Administrator	Roseman Wilson	The 20	11/22/13
Vice President for Instruction	William Harrishy	2120	1/15/14
President		e 124/14 Log File 1/24/14 Board Appr	, ,

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Office of Curriculum & Assessment

DEAN BCT DIVISION NOV 18'13

PROGRAM CHANGE OR DISCONTINUATION FORM

Effective Term: Fall 2012 **Program Code:** Program Name: Web Application Development Advanced **CVWBDV** Certificate **Division Code: BCT** Department: DMA **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: Review Program admission requirements ⊠Remove course(s): INP261 Continuing eligibility requirements Add course(s): Program outcomes Program title (title was _____) Accreditation information □ Description Discontinuation (attach program discontinuation Type of award plan that includes transition of students and timetable for phasing out courses) Articulation information Other_ Show all changes on the attached page from the catalog. Rationale for proposed changes or discontinuation: INP 261 has been moved to the Web Technology certificate and the courses in this advanced certificate are being changed to no longer list it as a Level 1 pre-req. Financial/staffing/equipment/space implications: None List departments that have been consulted regarding their use of this program. Signatures: Date Reviewer Print Name Signature Scott Shaper Initiator 115/2011 Jason Withrow Department Chair Division Dean/Administrator Rosemary Wilson Stuart Blacklaw Vice President for Instruction President Rose Bellanca

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posting on the website.

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Board Approval

Program Information Report

School of Digital Media Arts

Creativity abounds in the School of Digital Media Arts which encompasses the disciplines of animation, graphic design, internet professional, photography and digital video. The programs in Digital Media Arts introduce students to foundational skills in these disciplines and prepare them for creative jobs.

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.

The next level, an Associate Degree, is available for some programs. Credit hours from the certificate can be applied to the credit hours needed for the Associate Degree.

Internet Professional

Join the Web development industry through the completion of these certificates and degree.

Web Application Development (CVWBDV)

Advanced Certificate

Program Effective Term: Fall 2012

This program is designed for students interested in Web application development and programming. Courses focus on the knowledge and skills necessary for creating database-enabled applications, dynamic content, and interactive Web sites.

Articulation:

Eastern Michigan University, BS degree.

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: http://www.wccnet.edu/departments/curriculum/articulation.php?levelone=colleges.

Program Admission Requirements:

Students must complete the Web Technology Certificate or have significant programming and XHTML/CSS experience prior to starting this certificate

* 3 Geor - 11 W. 7 . 3.	7-7-4/4/4 MAR 3/4/8 3/4/4 - 1	1.562 July 12.150 -
INP 271	Client-Side Web Programming	3
INP 275	Web Database	3
INP 276	Mobile Web Development	4
INP 281	Server-Side Web Programming	3
INP 291	Programming with HTML5 and CSS3	3
Minimum C	redits Required for the Program:	16

PROGRAM CHANGE OR DISCONTINUATION FORM

Program Code:	Program Name: Web Application D	eveloper ment	Effective '	Term: Fall 2011
Division Code: BCT	Department: Digital Media Arts		per stage	
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:				
□ Description □ Discontinuation (attach program discontinuation) □ Type of award plan that includes transition of students and timetable □ Advisors for phasing out courses) □ Articulation information □ Other □ Show all changes on the attached page from the catalog.				
Show all changes on the attached page from the catalog. Rationale for proposed changes or discontinuation: INP programming courses are being expanded and this advanced certificate pertains to programming.				
Financial/staffing/equipment/space implications: N/A				
List departments that have been consulted regarding their use of this program. N/A – this program is used solely by INP				
Signatures:	D.J., M.	<u> </u>		D
Reviewer Initiator	Print Name Jason Withrow	Sign	nature	9/21/2010
Department Chair	Jennifer Baker	IN	2	11/3/10
Division Dean/Administra	tor Rosemary Wilson	Juman	Wion	11/5/10
Vice President for Instructi	ion Stuart Blacklaw	56	1	1/4/11

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C&A Database 2/10/11 Log File 19/10 S Board Approval

Endou

President

Office of Curriculum & Assessment

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Washtenaw Community College.

Certificates and Degrees.

http://www4.wccnet.edu/academicinfo/creditofferings/programs/degree.php?code=CVWBAP

Return to web format »

Web Application Developer (CVWBAP)

Advanced Certificate

Program requirements shown below are for catalog year: 2010 - 2011 Change Year

Description:

This program is designed for students interested in Web application development and programming. Courses focus on the knowledge and skills necessary for creating database-enabled applications, dynamic content, and interactive Web sites. Successful completion of the Web Technology Certificate is a prerequisite for enrolling in the Web Application Developer Advanced Certificate.

Contact Information:

Division: Business and Computer Technologies

School: School of Digital Media Arts Department: Internet Professional

Advisors: Kelley Gottschang, Tim White Jason Withrow

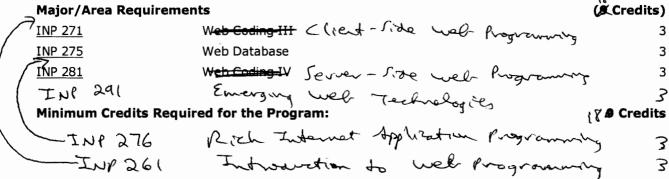
Articulation:

Eastern Michigan University, BS degree.

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: http://www.wccnet. edu/departments/curriculum /articulation.php?levelone=colleges.

Admission Requirements:

Students must complete the Web Technology Certificate or have significant industry experience prior to starting this certificate.



This website is for informational purposes only and is not to be construed as a binding offer or contract between WCC and the student. The information presented here is believed accurate, but is NOT guaranteed and is subject to change without notice.

For official information, see an Advisor.

Return to web format »

INP Curriculum Changes for Fall 2011

Revised Web Application Developer Advanced Certificate

Number	Course Title	Credits
INP 261	Introduction to Web Programming	3
INP 271	Client-Side Web Programming	3
INP 275	Web Database	3
INP 276	Rich Internet Application Programming	3
INP 281	Server-Side Web Programming	3
INP 291	Emerging Web Technologies	3

Total Credits: 18

PROGRAM CHANGE OR DISCONTINUATION FORM

Program Code: **CVWBAP**

Program Name: Web Application Developer

Effective Term: F2009

Division Code: BCT

Department: Internet Professional

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:			
Review Remove course(s): _INP 290, INP 295 Continuing eligibility requirements Add course(s): _ Program title (title was			
Rationale for proposed changes of			
Tim White has been added as a full-time faculty member to the INP department, so he is being added to the advisors. After completing the Web Technology certificate many students are ready to enter the industry, thus reducing their interest in (and need for) the INP 290 and INP 295 courses. Students already working in the industry see little need to take these courses. Even with offering the two courses just once per year (winter term) enrollments have been low. Over time the enrollments have continued to decline and are well under the number to successfully run the classes. By removing the courses from the advanced certificates it is easier for students to achieve those advanced certificates. Shorter and more focused certificates will help student's plan their education. Students who need to be retrained quickly because of job transitioning will be able to get their certificate faster.			
Financial/staffing/equipment/space implications: N/A			
List departments that have been consulted regarding their use of this program. N/A			
Signatures:	This A NT	C:	D-4-
Reviewer	Print Name	Signature	Date
Initiator	Kelley Gottschang	Cillingthouthing	2/4/09
Department Chair	Jason Withrow	Jason wethou	2/4/09
Division Dean/Administrator	Rosemary Wilson	Jogman Walen	2/12/09
Vice President for Instruction	Roger Palay	Mayer A. Palses.	3/19/09

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Larry Whitworth

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President

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 forensics or learn how to run a successful e-business, the growing field of applied information technology is waiting for you.

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 and General Education requirements.

Internet Professional

Join the Web development industry through the completion of these certificates and degree.

Web Application Developer (CVWBAP)

Advanced Certificate

Program Effective Term: Fall 2009

This program is designed for students interested in Web application development and programming. Courses focus on the knowledge and skills necessary for creating database-enabled applications, dynamic content, and interactive Web sites. Students will have the opportunity to work with a real client and will also develop their portfolio Web sites as part of this program. Successful completion of the Web Technology Certificate is a prerequisite for enrolling in the Web Application Developer Advanced Certificate.

Program Admission Requirements:

Students must complete the Web Technology Certificate or have significant industry experience prior to starting this certificate.

Major/Area Requirements	(9 cradits)
INP 271 Web Coding III	3
INP 275 Web Database	3
INP 281 Web Coding IV	3

Minimum Credits Required for the Program:

INTERNET PROFESSIONAL

E-Business (CVEBUS)

Advanced Certificat

Major/Area R	equirements	(14 credits)
BMG 155	Business on the Internet	3
BMG 215	Planning an E-Commerce Business	3
INP 190	Web Project Management	3
INP 290	Web Design Practicum	3
INP 295	Professional Practices	2
Minimum Credits Required for the Program:		14

E-Business (CVEBUS)

This program is designed for students interested in e-bus ness. Courses focus on business and technical aspects e-commerce and Web applications, as well as the fundamentals of project management. Students will have the opportunity to work with a real client and will also develotheir portfolio Web sites as part of this program. Successful completion of the Web Technology Certificate is a prerequisite for enrolling in the E-Business Advanced Certificate

Program Admission Requirements: Students must complete the Web Technology Certificate or have significate industry experience prior to starting this certificate.

Web Application Developer (CVWBAP)

Advanced Certificat

Major/Area Re	quirements	(14 credits)
INP 271	Web Coding III	3
INP 275	Web Database	3
INP 281	Web Coding IV	3
HNP-290-	Web Design Practicum	3
INP 295	Professional Practices	2
Minimum Cred	its Required for the Program:	(a) 14

Web Application Developer (CVWBAP)

This program is designed for students interested in We application development and programming. Courses foct on the knowledge and skills necessary for creating data base-enabled applications, dynamic content, and interactive. Web sites. Students will have the opportunity to work with a real client and will also develop their portfolio Web site as part of this program. Successful completion of the We Technology Certificate is a prerequisite for enrolling in the Web Application Developer Advanced Certificate.

Program Admission Requirements: Students must complete the Web Technology Certificate or have significant industry experience prior to starting this certificate.

Web Graphic Design (CVWBGR)

Advanced Certificat

Major/Area Requirements		(15 credits)
GDT 270	Web Site Design	4
INP 176	Web Animation I	3
INP 212	Web Graphics III	3
INP 290	Web Design Practicum	3
INP 295	Professional Practices	2
Minimum Cre	dits Required for the Program:	15

Web Graphic Design (CVWBGR)

This program is designed for students interested in the creative aspects of Web development, including interface design and interactive media. Courses focus on the knowledge and skills necessary for employment as a Wegraphic designer or production artist. Students will have the opportunity to work with a real client and will also develop their portfolio Web sites as part of this program. Successful completion of the Web Technology Certificate is a prerequisite for enrolling the Web Graphic Designation of the Web Graphic Designation of the Web Graphic Designation of Certificate.

Articulation: Eastern Michigan University, BS degree Copies can be obtained from the Counseling Office, program advisor, or from the Curriculum and Assessmen Office Web site: http://www.wccnet.edu/departments/curriculum/articulation.php?levelone=colleges.

Program Admission Requirements: Students must complete the Web Technology Certificate or have significant industry experience prior to starting this certificate.

PROGRAM CHANGE OR DISCONTINUATION FORM

Program Code: Effective Term: Fall 08 Program Name: Web Application Developer **CVWBAP** Division Code: Department: Internet Professional **BCT** 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: ☐ Review Program admission requirements Remove course(s): INP 280 Web Content Management Continuing eligibility requirements ✓ Add course(s): INP 281 Web Coding IV Program outcomes Program title (title was Accreditation information Description Discontinuation (attach program discontinuation Type of award plan that includes transition of students and timetable Advisors for phasing out courses) Articulation information Other Show all changes on the attached page from the catalog. Rationale for proposed changes or discontinuation: INP 280 has been discontinued. The certificate will now require INP 281, Web Coding IV. Financial/staffing/equipment/space implications: List departments that have been consulted regarding their use of this program. Signatures: Reviewer Print Name Signature Date Initiator Kelley K. Gottschang 05/01/08

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Kelley K. Gottschang

Department Chair

President

Division Dean/Administrator

Vice President for Instruction

05/01/08

Major/Area Requirements		(18 Credits)
INP 150	Web Coding I	3
INP 152	Web Graphics I	3
INP 153	Designing User Experience I	3
INP 170	Web Coding II	3
INP 182	Web Graphics II	3
INP 203	Designing User Experience II	3

Minimum Credits Required for the Program:

18 Credits

Web Technology (CTWBTC)

This program is designed for students interested in the Web development industry. Students will create standards-compliant, accessible, and usable Web interfaces that meet both user and client needs. Effective Web graphic design, user experience, and coding are stressed. Students will also learn the process of Web development, from conception to product delivery.

Program Admission Requirements: A high school course or equivalent course in basic computer skills, including use of the Internet.

Web Application Developer (CVWBAP) Advanced Certificate

Major/Area Requirements		(15 Credits)
INP 271	Web Coding III	3
INP 275	Web Database	3
INP 280	Web Content Management	
INP 290	Web Design Practicum	3
INP 295	Professional Practices	2
INP 281	Web Coding IV	3
Minimum Credit	s Required for the Program:	⊈ Credits

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Web Application Developer (CVWBAP)

This program is designed for students interested in Web application development and programming. Courses focus on the knowledge and skills necessary for creating database-enabled applications, dynamic content, and interactive Web sites. Students will have the opportunity to work with a real client and will also develop their portfolio Web sites as part of this program. Successful completion of the Web Technology Certificate is a prerequisite for enrolling in the Web Application Developer Advanced Certificate.

Program Admission Requirements: Students must complete the Web Technology Certificate or have significant industry experience prior to starting this certificate.

ADD

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 forensics or learn how to run a successful e-business, the growing field of applied information technology is waiting for you.

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 and General Education requirements.

Internet Professional

Join the Web development industry through the completion of these certificates and degree.

Web Application Developer (CVWBAP)

Advanced Certificate

Program Effective Term: Fall 2008

This program is designed for students interested in Web application development and programming. Courses focus on the knowledge and skills necessary for creating database-enabled applications, dynamic content, and interactive Web sites. Students will have the opportunity to work with a real client and will also develop their portfolio Web sites as part of this program. Successful completion of the Web Technology Certificate is a prerequisite for enrolling in the Web Application Developer Advanced Certificate.

Program Admission Requirements:

Students must complete the Web Technology Certificate or have significant industry experience prior to starting this certificate.

Major/Area Requirements	EXECUTION OF A COMPANY OF A PROPERTY OF	(14 credits)
INP 271 Web Coding III	i	3
INP 275 Web Database		in the contract of the contract in the contract of the contract in the contract of the contrac
INP 281 Web Coding IV		3
INP 290 Web Design Pr	acticum	그의 : : : : : : : : : : : : : : : :
INP 295 Professional Pr	actices	2

Minimum Credits Required for the Program:

14

Effective Term: Fall 2007

PROGRAM CHANGE OR DISCONTINUATION FORM

Program Code: CVWBAP

Program Name: Web Application Developer Advanced Certificate **Division Code: BCT** Department: Internet Professional 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: Review Program admission requirements Remove course(s): <u>INP 280</u> (4 credit hours) Continuing eligibility requirements Add course(s): INP 281(3 credit hours) Program outcomes Program title (title was _ Accreditation information Description Discontinuation (attach program discontinuation Type of award plan that includes transition of students and timetable Advisors for phasing out courses) Articulation information Other Total credit hours reduced from 15 to 14. Show all changes on the attached page from the catalog. Rationale for proposed changes or discontinuation: New course (INP 281) created to replace outdated information in INP 280 at the request of Office of Curriculum and Assessment. Financial/staffing/equipment/space implications: Reduce credit hours for program reduces classroom space usage. List departments that have been consulted regarding their use of this program. Internal change only Signatures: Reviewer **Print Name** Date Signature 3/07 Initiator Jason Withrow Department Chair Kelley Gottschang Division Dean/Administrator Ros emary Wilson Vice President for Instruction Roger Palay President Larry Whitworth Do not write in shaded area. Entered in: Banner_____ C&A Database_

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Office of Curriculum & Assessment

posting on the website.

Web Technology (CTWBTC)

Certificate

Major/Area Requirements		(18 Credits)	Web Technology (CTWBTC)
INP 150 INP 152 INP 153 INP 170 INP 182 INP 203	Web Coding I Web Graphics I Designing User Experience I Web Coding II Web Graphics II Designing User Experience II	3 3 3 3 3 3	This program is designed for students interested in the Web development industry. Students will create standards-compliant, accessible, and usable Web interfaces that meet both user and client needs. Effective Web graphic design, user experience, and coding are stressed. Students will also learn the process of Web development, from con-
Minimum Cre	edits Required for the Program:	18 Credits	ception to product delivery. Program Admission Requirements: A high school course or equivalent course in basic computer skills, including use of the Internet.

Web Application Developer (CVWBAP) Advanced Certificate

Major/Area Requirements		(15 Credits)
INP 271	Web Coding III	3
INP 275	Web Database	3
INP 280	Web Content Management	4
INP 290	Web Design Practicum	3
INP 295 INP 281	Professional Practices Web Codung IV	23
Minimum Credits Required for the Program:		45 Credits <i>14</i>

Web Application Developer (CVWBAP)

This program is designed for students interested in Web application development and programming. Courses focus on the knowledge and skills necessary for creating database-enabled applications, dynamic content, and interactive Web sites. Students will have the opportunity to work with a real client and will also develop their portfolio Web sites as part of this program. Successful completion of the Web Technology Certificate is a prerequisite for enrolling in the Web Application Developer Advanced Certificate.

Program Admission Requirements: Students must complete the Web Technology Certificate or have significant industry experience prior to starting this certificate.

Program Code:CVWBAD	Program Name:	Web Applicat	on Developer	Effective 7	Гегт: _F2006
Division Code:BCT	Department:	Internet Profession	onal		
2. Draw lines through as a separate sheet. 3. Check the boxes belowed courses as part of should be submitted as Requested Changes: Review Remove course(s): Changes:	ogram listing from the WC ny text that should be dele ow for each type of change of the proposed program chat the same time as the pro CPS 171, CPS 185, CPS 27 INP 295astion	ted and write in additional being proposed. Clarange, must be appropriate to the proposed of t	tions. Extensive narra	continuing a countinuing a countinuing a countinuing a countinuing a countinuing a countinuing arequirements are requirements anation are program distribution of studients.	an be included on urse, or adding as form, but
Show all changes on the a	ttached page from the catalog				
Courses are being chang improve their employm	d changes or discontinu- ged to focus more on the cent prospects and attract not be continued in the continu	core web design com more students to the		adent skills in th	nose areas to
List departments that	have been consulted reg	garding their use o	f this program.		
Signatures: Reviewer	Deie	nt Name	Signature		Date
			1		11/2/05
Initiator	Jason Withro		20	<u>-</u>	11/2/05
Department Chair	Jason Withre	ow	To me	50	
Division Dean/Adminis			Cheman !	Ch Xam	2/2/06
Vice President for Instru	action 3		Moces XII.	alas	2/24/01

Please submit completed form to the Office of Curriculum and Assessment.

Washtenaw Community College.

Certificates and Degrees A to Z.

http://www.wccnet.edu/academicinfo/creditofferings/programs/atoz/atoz2.php?code=CVWBAD

Return to web format »

Programs: Web Application Developer (CVWBAD)

Advanced Certificate

Program requirements shown below are for catalog year: 2005 - 2006 Change Year

Description: This program is designed for students who wish to develop skills in Web application development and programming, specializing in creating dynamic server-side applications for Web sites. It provides the knowledge and skills necessary for creating database-enabled applications, dynamic content, and interactive Web sites. The student will learn and use object-oriented programming, and apply industry-standard Web technologies, protocols, concepts, and practices in the development of effective and interactive systems for the Web. Successful completion of the Web Technology Certificate is a prerequisite for enrolling in the Web Application Developer Advanced Certificate.

See attacked

Division: Business and Computer Technologies

Department: Internet Professional

Advisors: Laurence Krieg, Jason Withrow, Kelley Gottschang

Admission Requirements:

Students must complete the Web Technology Certificate, Object-Oriented Programming with C++ Advanced Certificate or have significant industry experience prior to starting this certificate.

Major/Area	Requirements	(20 - 21 Credits)
INP 271	Web Coding III	3
INP 275	Web Database	3
INP 280	Web Content Management	4
INP 290	Web Development II	3
CPS 171 or	Introduction to Programming with C++	
CPS 185	Introduction to Visual Basic .Net Programming	4
CIS 270 or	Perl Programming	
CPS 276	Web Programming Using Apache, MySQL, and PHP	3 - 4
INT 295	Professional Practices	2

Total Credits Required for the Program:

28-21 Credits

Additional Information:

Related Web Sites:

This website is for informational purposes only and is not to be construed as a binding offer or contract between WCC and the student. The information presented here is believed accurate, but is NOT guaranteed and is subject to change without notice.

For official information, see an Advisor.

Back to the A to Z List of Programs

Web Application Developer Advanced Certificate

First Semester	Second Semester
INP 271: Web Coding III (3)	INP 280: Web Content Management (4)
INP 275: Web Database (3)	INP 290: Web Design Practicum (3)
	INP 295: Professional Practices (2)

Total Credits: 15

Description:

This program is designed for students interested in web application development and programming. Courses focus on the knowledge and skills necessary for creating database-enabled applications, dynamic content, and interactive websites. Students will have the opportunity to work with a real client and will also develop their portfolio website as part of this program. Successful completion of the Web Technology Certificate is a prerequisite for enrolling in the Web Application Developer Advanced Certificate.

Advisors:

Jason Withrow, Kelley Gottschang

Admission Requirements:

Students must complete the Web Technology Certificate or have significant industry experience prior to starting this certificate.

Computer Internet

Web Application Developer (CVWBAD) Advanced Certificate

Program Effective Term: Fall 2006

This program is designed for students interested in Web application development and programming. Courses focus on the knowledge and skills necessary for creating database-enabled applications, dynamic content, and interactive Web sites. Students will have the opportunity to work with a real client and will also develop their portfolio Web sites as part of this program. Successful completion of the Web Technology Certificate is a prerequisite for enrolling in the Web Application Developer Advanced Certificate.

Program Admission Requirements:

Students must complete the Web Technology Certificate or have significant industry experience prior to starting this certificate.

Major/Area Requirements		(15 credits)
INP 271	Web Coding III	3
INP 275	Web Database	3
INP 280	Web Content Management	4
INP 290	Web Development II	3
INP 295	Professional Practices	2

Minimum Credits Required for the Program

PROGRAM CHANGE FORM

Program Code:	Program Name:		ffective Term:
CVWBAD	Web Application Developer	<u>F</u>	2004
Directions:			
	ram listing from the WCC catalog and ir	, ,	
2. Draw lines through any a separate sheet.	text that should be deleted and write in	additions. Extensive narrative changes	can be included on
new courses as part of t	for each type of change being proposed he proposed program change, must be a the same time as the program change for	approved separately using a Course Syll	
Requested Changes:			
Title (title was	redits After changes	Advisors Articulation information Program admission requir Continuing eligibility requirers Program outcomes Other	uirements
Show all changes on the attac	thed page from the catalog.		
being changed to INP 27 Financial/staffing/equi	was incorrectly numbered, causing a con 1 (see Course and Syllabus Form submit pment/space implications: ave been consulted regarding the use	tted with this document).	Course number is
Signatures:			
Reviewer	Print Name	Signature	Date
Program Change Initiator	Jason Withrow	Jason within	3/10/04
Department Chair	Jason Withrow	Jason without	3/10/04 PM
Division Dean/Administrat	or Rosemary Wilson	Training Wilyon	3/17/04
Vice President for Instruction	on Roger Palay	Masses M. Valsu	3/25/04
Please submit completed	I form to the Office of Curriculum an	d Articulation Services.	
Office of Curriculum & Articular	ion Services	Program Chan Process	ge Form 8-2003
Access Program File 4/5	Log 4/5	Copied and Returned APR 7 13	=

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Programs: Web Application Developer (CVWBAD)

Advanced Certificate

Program requirements shown below are for catalog year: 2003 - 2004

Change Year

Description: This program is designed for students who wish to develop skills in web application development and programming, specializing in creating dynamic server-side applications for websites. It provides the knowledge and skills necessary for creating database-enabled applications, dynamic content, and interactive websites. The student will learn and use object-oriented programming, and apply industry-standard web technologies, protocols, concepts, and practices in the development of effective and interactive systems for the web. Successful completion of the Web Technology Certificate is a prerequisite for enrolling the Web Application Developer Advanced Certificate.

Division: Business and Computer Technologies

Department: Internet Professional

Advisors: Laurence Krieg, Jason Withrow

Admission Requirements:

Students must complete the Web Technology Certificate, Object-Oriented Programming Certificate or have significant industry experience prior to starting this certificate.

	Requirements	(20 - 21 Credits)
INP 270 1	Web Coding III	3
INP 275	Web Database	3
INP 280	Web Content Management	4
INP 290	Web Development II	3
Choose:	CPS 171 Introduction to Programming with C++ or	
	CPS 185 Introduction to Visual Basic .Net Programming	4
Choose:	CIS 270 Perl Programming or	
	CPS 276 Web Programming Using Apache, MySQL, and PHP	3 - 4

Total Credits Required for the Program:

20 - 21 Credits

Web Application Developer (CVWBAD) Advanced Certificate

Program Effective Term: Fall 2004

This program is designed for students who wish to develop skills in web application development and programming, specializing in creating dynamic server-side applications for websites. It provides the knowledge and skills necessary for creating database-enabled applications, dynamic content, and interactive websites. The student will learn and use object-oriented programming, and apply industry-standard web technologies, protocols, concepts, and practices in the development of effective and interactive systems for the web. Successful completion of the Web Technology Certificate is a prerequisite for enrolling the Web Application Developer Advanced Certificate.

Program Admission Requirements:

Students must complete the Web Technology Certificate, Object-Oriented Programming Certificate or have significant industry experience prior to starting this certificate.

ea Requirements	(20 credits)
Wah Cadina III	2
	3
Web Database	3
Web Content Management	4
Web Development II	3
Introduction to Programming with C++	
Introduction to Visual Basic .Net Programming	4
Perl Programming	
Web Programming Using Apache, MySQL, and Ph	HP 3-4
	Web Coding III Web Database Web Content Management Web Development II Introduction to Programming with C++ Introduction to Visual Basic .Net Programming Perl Programming

Minimum Credits Required for the Program:

20

Computer Internet

Web Application Developer (CVWBAD) Advanced Certificate

'UNDER CONSTRUCTION'

Program Effective Term: Fall 2003

This certificate prepares you for employment as a web application developer/programmer. These professionals specialize in creating dynamic server-side applications for websites. Courses focus on basic object-oriented programming concepts, developing database-enabled web applications, creating dynamic content for the web and creating effective and interactive systems for the web.

Business and Computer Technologies Division Internet Professional Department

Advisor:

Program Admission Requirements:

Students must complete the Web Technology Certificate, Object-Oriented Programming Certificate or have significant industry experience prior to starting this certificate.

Major/Ar	ea Requirements (21 Credits)
INP 270	Web Coding III	3
INP 275	Web Database	3
INP 280	Web Content Management	4
INP 290	Web Development II	3
Choose:	CPS 171 Introduction to Programming with C++ of	or
	CPS 185 Introduction to Visual Basic .Net Programming	4
Choose:	CIS 270 Perl Programming or	
	CPS 276 Web Programming Using Apache, MySo and PHP	QL, 3-4
Minimum	Credits Required for the Program:	21

PROGRAM APPROVAL DOCUMENT (PAD)			
Program Name: Web Application Developer	Program Code:		
Division: BCT Department: INP	CIP Code:		
Type of Award:	☐ Certificate		
Is this an occupational program eligible for Perkins Funding?	no Effective Year: Fall 2003		
Program Features Provide a general description of the program's purpose and general goals. Sta along with projected enrollment figures. Explain any connection to other WC or professional organizations. Note any special features of the program, such prepared, as well as potential career paths.	C programs, as well as accrediting agencies		
This certificate prepares you for employment as a web application of professionals specialize in creating dynamic server-side applications object-oriented programming concepts, developing database-enable content for the web and creating effective and interactive systems for	s for websites. Courses focus on basic ed web applications, creating dynamic		
Students should have completed the Web Technology Certificate, C Certificate or have significant industry experience prior to starting the	Object-Oriented Programming ils certificate.		
The current INP program has approximately 850 students enrolled i semester. Approximately 2/5 of these students are currently taking pursuing the Technical-Option certificate or degree.	n classes for the 2002-2003 Technical-Option classes or are		
We are not currently going to offer industry certification with this proorganizations such as CIW, Adobe and Macromedia for possible ac	ogram. However, we are looking at cereditation in the future.		
Students can combine this certificate with the Web Technology Certificate and the necessary General Education requirements to complete the Associate Degree in Applied Science, or they can build upon these foundation skills with one of our specialized Advanced Certificates.			
Our Associate Degree in Applied Science can currently be transferred to Wayne State University and Eastern Michigan University in the following programs:			
EMU College of Technology - Technology Managemen	ıt		
The articulation agreement states that INP students can transfer their INP Associate in Applied Science degree directly to the Technology Management program. The INP credits will count toward the Technical Concentration credits (46 credits) and some of the General Education requirements. This is a 2+2 agreement.			
EMU College of Technology - Communication Technology	ogy		
INP students can transfer almost all of their INP Associ Communication Technology program. The INP credits of Concentration credits as well as some of the General Ethe Communication Technology have agreed to work we to figure out the best solution for transferring credits.	will count toward the Technical Education requirements. Advisors in		
Need			

Office of Curriculum and Articulation Service

DRAFT

State the need for the program and provide evidence to support the stated need.

The current INP curriculum does not provide enough flexibility to add in new material as technologies evolve. We are limited by the number of credits required for both the Certificate (36) and Associate Degree (64). We cannot add new material without removing old material, and the evolution of Web technology doesn't always mean that old technology disappears.

In addition, students do not get enough of a well-rounded foundation, nor do they have the opportunity to specialize in a particular area of web development. Currently they have only two options: Design or Technical. These are somewhat vague and do not give the students enough of a specialization to compete in a tight economic market.

We have created a new structure that allows students the flexibility to obtain multiple advanced certificates as well as the opportunity to obtain a more well-rounded preparation for employment. In addition, it provides a framework into which new content can be added as the industry evolves. Furthermore, the new curriculum structure also allows students to obtain certification in a more reasonable amount of time - 2 semesters for each certificate as opposed to 3 full semesters plus spring semester.

The Web Application Developer certificate is one of several new certificates we are offering with this new structure. It allows students who have completed the Web Technology certificate to specialize in an area of web development (creating web applications). This provides students with both the core skills necessary for all web developers as well as specialized skills to give them a competitive advantage.

The INP Advisory Committee has verified the need for these changes to the INP curriculum in order to make sure our students are receiving the necessary skills for employment in an increasingly competitive market.

Outcomes

State the overall knowledge to be gained, skills to be learned, and attitudes to be developed by students who participate in this program.

Students will acquire a foundation knowledge of web design and development from the Web Technology Certificate and will then refine their skills in the area of web application development with this Advanced Certificate. Skills to be learned include object-oriented programming, creating database-enabled, dynamic websites and creating effective and interactive systems for the web. Students will also gain experience working with a real client as well as additional experience working in a team environment.

Curriculum

List the sequence of courses in the program by semester, including credit hours, co- and pre-requisites.

Number	Course	Credits	Pre-requisites*
First Term			
INP 270	Web Coding III	3	INP 170
INP 275	Web Databases	3	INP 170
Restricted Elec	ctive - choose one of the following:		
CPS 171	Introduction to Programming with C++	4	CPS 120 (Level II)
- or -	• •		` ,
CPS 185	Introduction to Visual Basic Programming	4	CPS 120 (Level II)
	•		` ,
Second Term	,		
INP 280	Web Content Management	4	(CPS 171 or 185)
			and INP 270
INP 290	Web Development II	3	INP 170 and 190
Restricted Elec	ctive - choose one of the following:		
CIS 270	Perl Programming	3	CIS 265 (Level II)
- or -			,
CPS 276	Web Programming Using Apache, PHP and My	SQL 4	CPS 171 or 185
			or CIS 175 or CIS 277
			(Level II)
			•

^{*} Pre-requisites assumed to be Level I unless otherwise stated.

Credits required to complete the program: 20-21

Assessment

Describe the assessment process that will be used to determine the effectiveness of the program.

The outcomes expected upon successful completion of this program include:

- Obtain the necessary skills for successful employment in reasonable amount of time
- Enhance existing skills (for professional development students)

Direct measures to be used in assessing these outcomes may include:

Portfolio assessment

Indirect measures to be used in assessing these outcomes may include:

- Employer surveys
- · Annual graduate surveys
- Alumni surveys

Budget

Specify program costs in the following areas, per academic year, including any start-up costs: faculty, training, travel, materials, resources, facilities, equipment, and any other costs.

There will be no start-up or additional costs for this program. The current year's budget (2002-2003) will be sufficient for supporting this new program.

Faculty: \$230,900

Training/Travel: approximately \$3000 Resources: No new resources needed

Facilities: Existing facilities in GM 005, GM 018 and TI 237 are sufficient Equipment: No new equipment needed, including software and hardware

Additional Costs: None anticipated

Approval Recommended:	Print Name	Signature	Date
Program Initiator: Catherine Hayes		Therent	yr 3/14/03
Dept. Chair/Director: Catherine Hayes		Cathin Hay	3/14/03

Washtenaw Community College

Dean/Administrator: Rosemary Wilson	Jones 3/7/03
VP of Instruction:	_ /hages HD /albey_ 3/26/03
President: LARRY WHITWORTH	Harry Whitesth 4/8/02
Date of Board Approval:	Q

Needs Assessment

Needs assessment was deemed unnecessary because this program (together with the additional certificates) is effectively replacing an existing program - CFINPC.

Advisory Committee

List the names, titles, and organizational affiliations of members of the advisory committee that has been selected to advise the college on the development and implementation of this occupational program. Include the committee's program recommendations.

Jacques Habra

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WASHTENAW COMMUNITY COLLEGE PRELIMINARY PROGRAM APPROVAL FORM

			- topp
Proposed Name of Prog Web Application Devel			
Faculty/Initiator(s):C	atherine Hayes, Laurence F	Krieg, Jason Withrow	
Division: BCT	Department: INP	Projected Star	rt up Term: FALL 2003
Type of Program:	A.A. A.S.	A.A.S.	
Certificate of Completion	n Certificate	Advanced Certificate	Post Associate Certificate
1. General Descriptio	n of Program (purpose, c	urriculum design, need	for new courses):
This certificate prepares you for employment as a web application developer/programmer. These professionals specialize in creating server-side applications for websites. Courses focus on basic object-oriented programming concepts, developing database-enabled web applications, creating dynamic content for the web and creating effective and interactive systems for the web.			

2. Need/rationale for Program (new jobs, industry changes, transfer etc...):

As web development needs become more complex, varied and specialized, there is an increasing need for developers who specialize in creating dynamic, interactive web-based applications that are database-enabled. The need for this specialization has increased as websites become larger and user demands more complex. In addition, many businesses and organizations need to put internal systems and processes online, which requires programmers who can create interactive web-based systems that can organize and manipulate large amounts of information.

Our Advisory Committee as well as several industry organizations and trade journals have concurred this need.

3. Enrollment Projections:

The current INP program has approximately 600 students enrolled in classes for the 2002-2003 academic year. Of the students pursuing a certificate or degree in the INP program, less than the majority have a technical focus. While an approximate number is difficult to project at this point, it's possible that up to 50 - 100 students could pursue the Web Application Developer certificate.

4. Instructional Resources and Space Needs (equipment, labs, classrooms, consumable supplies):

All necessary resources already exist.

5. Faculty Resources (full-time, part-time, consultant):

All necessary resources already exist.

6. Curricular Connections/Accreditations (Other WCC instructional units affected, articulation agreements):

This certificate can be used in conjunction with the INP Web Technology certificate to form the basis for the INP Associate in Applied Science degree. This degree can then be transferred to two different programs at Eastern Michigan University:

EMU College of Technology - Technology Management

- The articulation agreement states that INP students can transfer their INP Associate in Applied Science degree directly to the Technology Management program. The INP credits will count toward the Technical Concentration credits (46 credits) and some of the General Education requirements. This is a 2+2 agreement.

EMU College of Technology - Communication Technology

- INP students can transfer almost all of their INP Associate in Applied Science degree to the Communication Technology program. The INP credits will count toward the Technical Concentration credits as well as some of the General Education requirements. Advisors in the Communication Technology have agreed to work with INP students on an individual basis to figure out the best solution for transferring credits.

7. Program Development Plan (timetable, costs, personnel):

All courses relevant to this new program either already exist in the current INP curriculum or are already developed and waiting approval from the Curriculum Committee for inclusion in the Fall 2003 curriculum. Once approved, we plan to implement this program starting Fall 2003.

The current INP curriculum will be replaced with this new program. To help students, advisors and other faculty through the transition, we plan to take the following measures:

- 1. All INP students will be sent a letter during the Spring/Summer semester informing them of the upcoming changes. This mailing will also include the list of equivalent courses in the new program and the contact information for all full-time INP faculty.
- 2. An email containing the same information as the letter will be sent to the INP student email list (inpannounce@wccnet.org).

Office of Curriculum and Articulation Services	2	
Preliminary Program Approval Form/ Revised 6-21-02		
Copies: IAC:, Curriculum C	Committee:	
Copies: President's Staff, Faculty/Initiator, Dep	oartment Chair/Director, Dean, Curriculum Fi	les

- 3. The INP website will be updated to reflect the new certificates and associate's degree and will prominently feature the course equivalencies between the old and the new programs.
- 4. INP faculty will hold an informational session for the WCC counselors and advisors to introduce them to the new certificates and degrees and provide them with the course equivalency information.
- 5. INP faculty will take part in academic advising sessions to assist students in choosing the appropriate classes in the new curriculum.

No additional costs or personnel are necessary for the development, implementation or maintenance of this program.

Signatures: Faculty/Initiator: All Date: 2/26/6	3
Department Chair/Director:	16/03
Comments: Dean(s)/Administrator: Date: 5	303
Comments: Vice President of Instruction:	
Approved for development of Program Approval Document (PAD)	
Returned for additional review/development (details attached)	
Not approved Signature: Date: 3	126/03
\smile	