Proposal for Website Design & Development Major William Woods University

According to the Occupational Outlook Handbook from the U.S. Department of Labor's Bureau of Labor and Statistics, employment of Web design specialists is estimate to <u>increase 20 percent</u> by 2022. Today, the median salary for Web developers is <u>\$62,500</u>. With some of these colleges, you could be making that annually within just two-and-a-half years! http://www.bls.gov/

WWU was the <u>first undergraduate Usability Testing lab in Missouri</u>. At present – only 2 Usability Testing labs exist in undergraduate education in Missouri - University of Missouri and WWU. WWU is the ONLY Usability Testing lab in Missouri utilizing both heat mapping and usability testing software.

Please think of this proposed major as much <u>more than Web Design/Development</u> – it also incorporates a strong Usability Testing component.

Does an individual need an actual "Web Design degree" for these jobs?

Please keep in mind, the students we plan to graduate will have a heavy emphasis in Usability Testing & Human Factors. Our lab provides a tremendous opportunity for this area to be incorporated into Web Design & Development. Short answer – yes, if they want to get jobs in the web development / usability field.

The 50 best-paying Careers with Only a Bachelor's Degree - **Web Designer #41** http://www.thebestschools.org/blog/2012/07/02/best-paying-careers-bachelors-degree/

Degreehub.com

"Internet web design is a fascinating, ever-growing and changing industry. Today with the proliferation of Internet-based products and services offered by corporations and businesses, the chances of success are outstanding. New innovations in computer technology mean that computer graphics and design will forge ahead and create new specialized areas. Considering that the median salary for a senior web designer with a bachelor's degree in web design is \$80,176, it's easy to see that a web design degree is worth it."

http://www.computersciencedegreehub.com/is-a-web-design-degree-worth-it/

UX Matters: See do I need a degree in UX

Even though **continual on-the-job learning** is the most important, 90% of respondents had obtained a university degree. (<u>User Experience Career Advice From 1,015 UX Professionals</u>) The most common **educational level** was a <u>master's degree</u>: 52% had at least one master's degree (some had two, which seems like overkill). Only 6% of respondents were PhDs. Most of the remaining respondents with university diplomas held bachelor's degrees and 1% had associate's degrees. (<u>User Experience Careers - Nielsen Norman Group</u>) http://www.uxmatters.com/mt/archives/2012/01/how-important-are-ux-degrees-and-certifications.php

Is that how they are posted on job sights?

Yes, that is absolutely how the jobs are listed.

Like all majors, you may see a variation in the titles:

Website Design/Development

Other titles used: Website Developer II, Website designer, Website & Social Media, Website Developer, Website Builder, Website Specialist, Website Coordinator, Website Manager, Website Operations Engineer, Website Engineer, Website Application Developer, Website Technician.

11,330 Career Builder – Web designer November 12, 2015 879 Career Builder – Web Developer Nov 11, 2015 9,283 – Indeed --Web Designer Nov 13, 2015 14,335 – Indeed --Web Developer Nov 13, 2015

Usability Testing/Human Factors

894 Jobs – Career Builder (Nov 12, 2015) 16,034 – Indeed (Nov 13, 2015)

Other Titles Used:

Usability Research Analyst, Usability Researcher, Usability Specialist, Senior Usability Manager, Usability Designer, Usability Architect/Interactive Designer, QA Analyst, IT Quality Assurance Analyst, UX Designer

Website usability

User Experience Researcher, Digital, Web & online manager, Web Content Management Specialist, User Experience

Do employers seeking Web Designers require a BS in Web Design?

 The Website and Usability jobs our students apply for all require a Bachelor or Masters (Usability) in the field. Remember, our majors will have a strong concentration of UX, Usability & Human Factors experience. <u>Those jobs absolutely require a Bachelors or Masters degree</u>

If you have not kept pace with the industry, you might think website design / development is a "hobby" job. No longer. Because of the increase in programming, usability, design methods, etc. many of the best jobs are now requiring a college degree.

What other institutions offer a degree in Web Design and Development?

TOP MASTERS programs in the nation

- University of Florida- Web Design
- University College (Denver) Web Design & Development
- South New Hampshire University- Information Technology Web Design
- Boston University- Computer Information Systems Web Application Development
- Aspen University- Information systems Web Development
- Academy of Art University- Web Design & New Media Illinois Institute of Technology- Web Design & Application Development

Top Bachelor programs in the nation

- 1. Arizona State University BAS. Internet & Web Development
- 2. University of Massachusetts Web Design & Development part of BS degree
- 3. Baker College Web Development
- 4. Southern New Hampshire University Bachelor of Science in Information Technology Web Design.
- 5. Santa Clara University = B.S.Web Design (ranked by U.S. News & World Report)
- 6. Tulane University of Louisiana B.S. Website Development
- 7. Neumont University B.S. Web Design & Development
- 8. Fort Hayes State University B.S. Information Networking & Telecommunications Web Development (Can further enhance degree by earning additional certificates in Web Development, E-Commerce, Certified Web Design.
- 9. Wilmington University B.S. Web Information Systems
- 10. Champlain College BS Web Design & Development
- 11. Independence University BS Web Design & Development
- 12. Southern New Hampshire University Information Technologies Web Design & Development
- 13. Liberty University Management Information Systems Web Development
- 14. South University Information Technology with a Specialization in Multimedia & Web Development
- 15. American Public University B.S. Information Technology Web Development
- 16. Harding University BS in Web Design & Media
- 17. Davenport University BS in Computer Information Systems with Web Design& Development Major
- 18. Morrisville State College Bachelor in Information Technology: Web Development Concentration
- 19. Dakota State University BS Digital Design: Web Design & Production
- 20. Wilmington University BS in Web Information Systems
- 21. Lewis Clark State College Bachelor of Applied Science Web Design & Development
- 22. University of Wisconsin BAS Interactive Web Management also have a BA In Web & Digital Media Development
- 23. Bellevue University- BS Web Technologies

- 24. Utah Valley University BS Web Technologies
- 25. Youngstown State University Several Web related degrees
- 26. Brigham Young University BS Web Design & Development
- 27. CUNY New York City College of Technology Bachelor of Technology in Communication Design /Web Design Specialization or Communication Design Mgmt with Web Design Specialization or Computer Systems with Web Design Specialization.

What do these institutions offer in terms of courses?

Regional Committee / Governing board - suggests AACE Association for the Advancement of Computing in Education - SITE guidelines (Society for Information Technology & Teacher Education)

What Is the Curriculum of a Bachelor's Degree in Web Design?

Bachelor's degree programs in web design may grant Bachelor of Science, Bachelor of Arts or Bachelor of Fine Arts degrees. The curriculum may include programming, graphic design and communication courses. Read this article to learn more about the courses you can take in a bachelor's degree program in web design. Schools offering Digital Design degrees can also be found in these popular choices.

Web Design Bachelor's Degree Overview

Bachelor's degree programs in web design may be combined with the study of web development or interactive media. Some programs offer concentration areas, like interface design, back-end development or interactivity. Programs often teach you how to code using various programming languages, include CSS, HTML5, JavaScript, XML and ActionScript. You also learn design skills, like creating vector and raster graphics and developing animations. And, to draw traffic to your site, you study search engine optimization and ad-word placement. Through projects you create during your degree program, you can assemble a professional portfolio. Continue reading for details about some of the differences between types of web design bachelor's degree programs.

Bachelor of Science Web Design

A Bachelor of Science (BS) in Web Design program covers technical and design training, though this type of program is typically more focused on technical aspects. Classes introduce you to web programming applications, operating systems and network environments. Along with technical training, the curriculum within a BS in Web Design incorporates design and digital art courses and marketing strategy concepts, and it can prepare you for creating effective and attractive websites. You may take courses in:

- Digital arts and design
- Web publishing
- Web applications programming
- Communications and networking
- Virtual worlds
- Animation
- Streaming media technology

Bachelor of Arts or Bachelor of Fine Arts in Web Design

Student interested in a more creative web design career can consider a Bachelor of Arts (BA) or Bachelor of Fine Arts (BFA) in Web Design. These types of programs aren't as prevalent as BS programs. Also, BA and BFA degrees are offered in fields like visual communication, digital design and graphic design, and many offer a focus in web design. Curricula within these bachelor's programs focus heavily on design and art training in both digital and illustrative creation, though you also get technical training. Topics explored in this type of program may include:

- Virtual environment design
- · Graphic design
- Typography
- Web and multimedia design foundations
- Design and programming concepts
- Motion graphics
- User experience

SEE SPECIFIC CURRICULUM FROM TOP SCHOOLS

Certified Internet Webmaster (National Certification)

- Web site development essentials, including the site development process, customer expectations, and ethical and legal issues in Web development.
- Web design elements, including aesthetics, the site user's experience, navigation, usability and accessibility.
- Basic Web technologies, including Hypertext Markup Language [HTML], Extensible HTML
 [XHTML] and extended technologies, image files, GUI site development applications, and site
 publishing and maintenance.
- Advanced Web technologies, including multimedia and plug-in technologies, client-side and server-side technologies, and Web databases.
- Popular production tools, including Microsoft Expression Web, and Adobe Dreamweaver, Fireworks and Flash.
- Design and development technologies, including Cascading Style Sheets (CSS), Extensible Markup Language (XML), JavaScript, Java applets and Dynamic HTML.
- Current issues in Web design, including the extensibility of design tools, compatibility of these tools, open-source applications and the functionality of current Web browsers.

https://www.upwork.com/blog/2014/03/web-development-101-top-web-development-languages-2014/

Is this proposal similar/different to what is being offered?

Different. This proposed <u>incorporates</u> Graphic Design, Programming, Required Usability Testing & UX, Interactive Web Communications, Marketing, Required Web Internship.

It does <u>NOT include</u> Accounting, Entrepreneurship, Intro to Web 2.0, Productivity Tools, Project Management, Enterprise Collaboration Software, Systems Analysis.

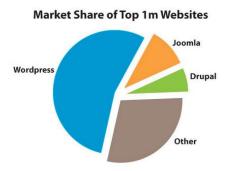
Why is there not more of a specific programming (language) component?

CSS & HTML5 required: There is a programming language component – it is clearly built into the MIS 370 courses. A student will obtain 4 programming languages which is standard for accreditation for the program.

As mentioned earlier – We will rotate in new programming languages **EVERY SEMESTER.** PHP, Javascript, Java - Ruby Rails optional

It seems if it is going to be a Website <u>Design</u> and <u>Development</u> Major then students with that degree should be able to develop a website on multiple platforms/languages

Consider the market

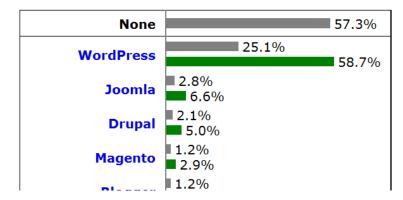


• graph obtained from W3 Tech's Survey 2014

Responsive design is cross platforms – we aim for 100% cross platform design

- o HTML5 is cross platform as is Wordpress, Drupal and Joomla.
- We of course do cross-platform testing of all websites (that is what is involved with usability testing)
- Over 75 million sites (up 15% from 2014) are on Wordpress Almost 55% of the 1miion most visited websites in the world are run on Wordpress. – so yes, we often focus on responsive Wordpress development.

How to read the diagram: 57.3% of the websites use none of the content management systems that we monitor. WordPress is used by 25.1% of all the websites, that is a content management system market share of 58.7%.



There was some concern in that the programming the students do/would get that you did discuss is mostly from computer-based modules.

- The programming modules I mentioned in our first meeting involved what students are doing in SWAT that is a voluntary student organization where yes, they are learning programming languages on their own with no formal instruction because they want to learn it and we don't have a website design & development major that can formally teach them these languages. Yes, they do use computer based modules.
- WWU has long pushed Atomic Learning A computer-based module. IN addition, some
 of the MIS classes supplement classroom instruction with computer based modules.
 They are strong reinforces of what is learned in the classroom, but by no means the sole
 instruction method.
- o If this proposal were approved we would of course not use computer based modules as a sole learning tool. They would be used, however, as outside support for student learning/reinforcement. I encourage you to visit TeamTreehouse and CodeAcademy to experience the expert delivery of these modules to help you understand the strength of their support.

I know you expressed you wanting it a true major

Website Design & Development is a true major. Those who have kept pace with the market know it is a strong major.

We are aware and are not interested in moving forward as an Interdisciplinary major.

"Does not require any additional courses."

Again, we were told there were no funds to hire additional faculty to teach new courses.

The only reason we did not propose new classes is there are no funds to hire new faculty to support new classes (we have asked numerous times). We knew that would immediately kill a proposal if we proposed new resources/faculty. If approved and the Major were to grow, we would absolutely submit new courses/resources to improve the overall program. The last time we presented (5 years ago) a Web Design certification program that required just one new course – it was killed in discussion due to the need for an additional adjunct.

That point leads us to discussions that a major should have some element/courses that are specific to that degree program. Would it be possible revise the MIS into two concentrations?

Unfortunately no- to ask the students to take the full MIS core (many of those classes are <u>not</u> <u>relevant</u> to the Web Major and then in addition take all the remaining required courses for a Web concentration is not feasible or fair to website students.

• The MIS program is a strong program based on national standards for MIS degree programs and to start revising that curriculum would hurt the integrity of the program.

Honestly, we are not interested in an Interdisciplinary Studies Degree. This is a viable major that is proven to get jobs. We have a state of the art usability lab that lends high probability for careers beyond graduation. It is a highly recruited major with projected growth – so to deny it the ability to be a viable major is not an option.

At a time when WWU is struggling with enrollment, to add a new major that requires no new resources, faculty or courses seems like a win-win, however, the MIS department will understand if you cannot approve this proposed major.



University of Florida- Web Design http://www.jou.ufl.edu/wdoc/

University College (Denver) - Web Design & Development http://universitycollege.du.edu/ict/degree/masters/web-design-and-development-online/degreeid/400#courses

South New Hampshire University- Information Technology Web Design http://www.snhu.edu/online-degrees/masters/ms-in-information-technology/web-design

Boston University- Computer Information Systems Web Application Development http://www.bu.edu/met/programs/graduate/computer-information-systems/web-application-development/

Aspen University- Information systems Web Development http://www.aspen.edu/degrees/masters-degree/master-of-science-in-information-systems-web-development/classes

Academy of Art University- Web Design & New Media http://discussion.academyart.edu/external/semesterplan?0&career=GRAD&plan=33&length=6

Illinois Institute of Technology- Web Design & Application Development https://appliedtech.iit.edu/office-of-professional-development/master-certificate-web-design-and-application-development

Sample Courses

http://www.snhu.edu/online-degrees/bachelors/bs-in-information-technologies/web-design-and-development

http://www.byui.edu/online/degrees-and-programs/web-design-and-development-x95124

http://www.bellevue.edu/degrees/bachelor/web-technologies-bs/

http://www.umuc.edu/academic-programs/bachelors-degrees/digital-media-and-web-technology-major.cfm

http://www.sanfordbrown.edu/areas-of-study/technology/web-design-and-development/bachelor-of-science-in-web-design-and-development?campus=online

Schools

Top programs:

Great list – summarizes what they include: http://affordableschools.net/15-affordable-bachelors-degrees-web-design-development/ (Completed)

http://www.graphicdesigndegreehub.com/best/top-affordable-online-web-development-degree-programs-bachelors/ Completed

http://www.bestcollegesonline.com/rankings/web-design/

http://www.bestdegreeprograms.org/top-schools/online-web-design-degree-programs - Completed

http://www.guidetoonlineschools.com/degrees/art/web-design (completed)

http://affordableschools.net/15-affordable-bachelors-degrees-web-design-development/ Completed

http://www.champlain.edu/computer-sciences/online-web-design-development-degree (completed)

 $\underline{\text{http://www.internationalstudent.com/study-web-design-and-web-development/top-schools-to-study-web-design/} \ completed$

http://www.fullsail.edu/degrees/campus/web-design-development-bachelors

Masters:

Usability: http://www.usabilityfirst.com/training-workshops/usability-degree-programs

https://www.missouriwestern.edu/psychology/graduate/

https://www.jou.ufl.edu/wdoc/uf-college-of-journalism-and-communication-mamc-specialization/curriculum-mamc/

http://learn.org/articles/Which_Well-Known_Schools_Offer_a_Graduate_Degree_in_Web_Design.html http://www.onlinecollege.org/masters/web-design/

- http://learn.org/articles/What is the Curriculum of a Bachelors Degree in Web Design.html
- https://garage.godaddy.com/webpro/wordpress/banking-on-e-commerce-with-wordpress-and-woocommerce/
- http://www.smashingmagazine.com/2011/11/wordpress-cms-crown-drupal-joomla/
- http://www.smashingmagazine.com/2011/11/wordpress-cms-crown-drupal-joomla/
- https://managewp.com/14-surprising-statistics-about-wordpress-usage