CIT SPAN SCHOLARS PROGRAM

The Computer & Information Technology (CIT) Department at Indiana University – Purdue University Indianapolis (IUPUI) will award tuition scholarships each academic year to academically eligible Indiana high school students engaged in coursework at the Indianapolis campus through the IUPUI SPAN Division.

Secondary students who meet the eligibility requirements must submit a complete application packet to the IUPUI SPAN Office. **Packets must be complete\* and must include:**

1. **SPAN Application Form** – completed and signed by student and high school guidance counselor or high school principal.
2. **Grade Transcripts** – current and complete high school grade transcript.
3. **Essay** – Essay Question (200 words or more): What life experiences have motivated you to explore the field of Computer Information Technology?

**\*PLEASE NOTE: partial packets will not be accepted and will not be reviewed for the scholarship.**

CIT scholarship recipients (CIT SPAN Scholars) will have the opportunity to enroll in specific CIT courses (outlined within this document).

***CIT SPAN Scholars CRITERIA:***         CIT SPAN Scholars awards are competitive. **Completed applications with grade transcripts and the required essay are due in the IUPUI SPAN Division Office by JULY 15, 2016 for fall admission and NOVEMBER 15, 2016 for spring admission**.

Applicants to the CIT SPAN scholarship program should meet the following eligibility requirements:

* Currently an INDIANA HIGH SCHOOL student with a minimum\*\* high school cumulative GPA of 3.0 or higher. **(\*\*please note: because CIT SPAN scholarships are COMPETITIVE, meeting minimal grade requirements does not guarantee acceptance. Students with strong academic performance and a strong essay have the best chance of receiving a scholarship.)**
* Received grades of “A” in all computer and technology related coursework at the high school.

CIT SPAN Scholars will receive tuition support (approximately 50% off tuition) provided that the student maintains eligibility requirements including an overall GPA of at least 3.0 in both IUPUI courses and their high school courses.

Application, essay, and official grade transcript must be received by the SPAN Division Office by the deadlines stated in this packet.  **Complete CIT SPAN scholarship packets (including application form, grade transcript, and essay should be mailed to:**

**IUPUI SPAN DIVISION**

**815 West Michigan Street**

**Indianapolis, INDIANA 46202**

**If you have questions, please call (317)274-0382 or email** ucspan@iupui.edu

**CIT SPAN SCHOLARS Courses**

[**CIT 10600 Using a Personal Computer**](http://cit.iupui.edu/cit/courses/cit106.html) (3 cr.) Class 2, Lab 2; or Class 3. This course provides an introduction to word processing, spreadsheet, and presentation software. It also includes instruction in basic computer concepts, the use of Windows operating systems, the Internet, and collaborative tools. Applications are taught through the use of problem solving tutorial assignments, projects, and tests.

[**CIT 11200 Information Technology Fundamentals**](http://cit.iupui.edu/cit/courses/cit112.html) (3 cr.) Class 3. This course provides students with a working knowledge of the terminology, processes, and components of information systems and the application development process. Students will receive hands-on experience with the Internet and the World Wide Web, as well as state-of-the-art hardware and software.

[**CIT 14000 Programming Constructs Laboratory**](http://cit.iupui.edu/cit/courses/cit140.html) (3 cr.) Class 2, Lab 2. P: (CIT 10600 and CIT 12000) or MATH 159 or MATH 154 or ECET 10900. This course is an introduction to problem-solving techniques, program design and development, programming logic, and object-oriented terminology and concepts.

**CIT 17600 Information Technology Architectures** (3 cr.) Class 3. P: CIT 11200. A conceptual and technological survey of information technology architectures inclusive of operating systems, network operating systems, distributed systems architectures, and distributed application architectures. Interoperability between these architectural components is explored. Current technology and trends in each architectural element are reviewed.

[**CIT 20600 Advanced Computer Applications**](http://cit.iupui.edu/cit/courses/cit206.html) (3 cr.) P: CIT 10600. This course will cover the advanced topics of office applications in Word, Excel, and PowerPoint, as well as establishing desktop publishing skills using Microsoft Publisher. Topics include web-driven applications, forms and documents, macros, financial functions, worksheet queries, web spreadsheets, web data bases, interactive OLS, VBA, brochures, newsletters, and business forms.

[**CIT 21200 Web Site Design**](http://cit.iupui.edu/cit/courses/cit212.html) (3 cr.) Class 3. This course is designed to give students an introduction to web site design and site creation. The course involves learning current standard XHTML fundamentals, CSS and design concepts. The proper design approach for constructing Web sites and related techniques will also be covered.

[**CIT 21400 Introduction to Data Management**](http://cit.iupui.edu/cit/courses/cit214.html) (3 cr.) Class 3. P: CIT 11200 or CIT 12000 or M118 or MATH 154 or MATH 159 or ECET 10900. Introduction to basic database development concepts. Extensive exploration of data manipulation using a relational DBMS and SQL. Students develop database applications using MS Access and SQLPlus.

**SECOND YEAR\* CIT SPAN SCHOLARS Courses (\*pre-reqs include specific Mathematics courses as well as other Computer Information Technology course completion. Second year scholars will determine eligibility with the SPAN academic counselor)**

[***CIT 21300 Systems Analysis and Design***](http://cit.iupui.edu/cit/courses/cit213.html) *(3 cr.) Class 3. P: CIT 21400 and (CIT 14000 or CIT 21500). This course provides students with the concepts, processes, and tools of systems analysis and systems design. Object-oriented methods and tools are utilized with a focus on developing web-based interfaces and prototypes.*

[***CIT 21500 Web Programming***](http://cit.iupui.edu/cit/courses/cit215.html) *(3 cr.) Class 3. P: CIT 21200 and P or C: CIT 21400. This course will provide students with the knowledge and techniques of a variety of Web programming languages. Both client and server side languages will be examined and will include PHP, MySQL and Javascript.*

[***CIT 30600 Computer Technology Applications Capstone***](http://cit.iupui.edu/../cit/courses/cit306.html) *(3 cr.) P: CIT 20600. This course will study how organizations incorporate and automate computer applications, web applications and web services. Students will create a capstone project and a training module for an organization focusing on the use of current emerging computer and web application technologies as well as support and communication tools.*

[***CIT 31200 Advanced Web Site Design***](http://cit.iupui.edu/cit/courses/cit312.html)*(3 cr.) Class 2, Lab 2; or Class 3. P: CIT 21200.*

*This course covers the tools and techniques necessary to maximize the effectiveness of deploying e-commerce Web applications and address both client and server side strategies with a focus on optimal Web design strategies. Strategies focus on internal design issues such as security, reusability, usability, accessibility and architecture and external design issues such as user interfaces, load times and multimedia.*

[***CIT 31300 Commercial Web Site Development***](http://cit.iupui.edu/cit/courses/cit313.html) *(3 cr.) Class 3. P: CIT 21500. This project-based course will have students develop a data driven web site to support business processes. Students will utilize both client and server side languages in developing the site.*

[***CIT 34600 Desktop Publishing Applications***](http://cit.iupui.edu/cit/courses/cit346.html) *(3 cr.) P: CIT 10600 or equivalent. Interdisciplinary introduction to desktop publishing technology integrating application and hardware. Students will learn desktop publishing theory and techniques to produce flyers, newsletters, brochures, business forms, web forms, and publications with database interconnectivity. Service learning includes a complete DTP solution for a small business or not-for-profit agency.*

CIT CERTIFICATE PROGRAMS

**IT Certificate for Web Development**

AVAILABLE 100% ONLINE

The IT Certificate for Web Development is a primer on the principles and techniques used to develop Web-based applications. The six course series covers the application development life cycle, including analysis, design, coding, and implementation, all applied within a Web environment.

This certificate will provide you with the skills and knowledge to become an entry-level Web application developer.

**Plan of Study**

|  |  |  |
| --- | --- | --- |
| **Course** | **Title** | **Pre- and Co-Requisites** |
| CIT 21200  | Web Site Design |   |
| CIT 21400 | Web Data Management | CIT 11200 or CIT 12000 or Math-M118 or Math 15400 or Math 15900 or ECET 10900  |
| CIT 21500  | Web Programming | CIT 21200 and P: or C: CIT 21400 |
| CIT 21300 | Object-Oriented Analysis & Design | CIT 21400 and (CIT 14000 or CIT 21500)  |
| CIT 31200  | Advanced Web Site Design  | CIT 21200  |
| CIT 31300 | Commercial Web Site Development | CIT 21500  |

**Information Technology Certificate Plan of Study** [**Checksheet**](http://cit.iupui.edu/cit/documents/INTECCRT.PlanOfStudy.CIT.4108.pdf) To begin the journey toward earning your certification, or to answer any questions that you may have about the program, feel free to email Rob Elliott or call 274-9705.

**Computer Technology Applications Certificate**

AVAILABLE 100% ONLINE The Computer Technology Applications Certificate (CTAC) is ideal for degree-seeking university students wishing to combine their intellectual capabilities with IT skills in preparation for serving in a knowledge-based economy. CTAC also will serve returning students seeking a standalone certificate to complement their professional endeavors.

Information Technology (IT) permeates today's information age, knowledge-based economy, and all industries and occupations. Knowing how to fully integrate and take advantage of industry application programs is essential for present and future employees. One course in computer applications at the high school or college level does not prepare students to develop interactive applications and exploit the software to its fullest extent.

Certificate holders will develop the background to create professional, effective communications for use in a knowledge-based economy using industry-standard software application programs.

**With a CTAC Certificate, you will:**

* Become an IT power user of office software applications
* Use software rather than programming to
	+ Customize interfaces for professional use
	+ Create interactive web sites
	+ Generate online forms, data collection devices, and tables and charts
	+ Automate office productivity
	+ extend software applications to create customized solutions
* Develop software training modules
* Complete a service-learning project
* Build an IT-intensive portfolio showcasing CTAC products
* Learn how to survive and evolve in the ever-changing IT field, regardless of your profession
* Investigate and evaluate advanced and emerging IT communication tools
* Research the historical development and examine the future impact of IT support and communication tools

**CTAC Courses**
CTAC is a six-course, 18 credit hour sequence of classes designed to give you a strong background in computer applications equipping you to be successful in your professional and educational endeavors while giving you skills to transition to the technology of the future. Combine CTAC with a current IUPUI degree or return to school to become more IT savvy. In the required courses, you will use software applications rather than programming to build web sites, develop software training modules, create other interactive IT products, and complete a service learning project. Electives allow you to explore topics such as digital technologies for the consumer, desktop publishing, ethics, IT fundamentals, and HTML.

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| **REQUIRED** |
| **Course** |   | **Prerequisites** |
| CIT 10600  | Using a Personal Computer  | None |
| CIT 20600  | Advanced Computer Applications | CIT 10600 or equivalent |
| CIT 30600  | Computer Technology Appl. Capstone | CIT 20600 |

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|  **ELECTIVES - Choose 3** |
| **Course** |   | **Prerequisite**  |
| CIT 11200   | Information Technology Fundamentals  | None |
| CIT 21200   | Web Site Design  | CIT 10600, CIT 11200, or instructor consent |
| CIT 30100   | Digital Technologies for the Consumer | CIT 10600, CIT 11200, or instructor consent |
| CIT 34600   | Desktop Publishing Applications | CIT 20600 |
| OLS 26300  | Ethical Decisions in Leadership | None |

[Computer Technology Applications Plan of Study Checklist](http://cit.iupui.edu/cit/ctac/documents/CTACPlanOfStudyCIT4088.pdf)

*"Information technology is already critical to collecting and analyzing all types of information, performing many kinds of work, and communicating ideas in almost every filed of endeavor. The value to society is not just utilitarian, however. Information-literate citizens are essential to marinating a free and open society."*

- Todd D. Kelly, Assoc. Provost, St. Mary's College,
Quoted in **Educause**

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