



**FLORIDA INTERNATIONAL UNIVERSITY  
UNIVERSITY CURRICULUM COMMITTEE**  
*Proposal for a New Course*

**DO NOT TYPE IN THIS BOX**

Bulletin # : 3

Academic Year : 2019-20

1. School/College Engineering and Computing  
Div./Dept. in Which Taught School of Computing and Information Sciences

2. CGS 2 XXX 3  
Alpha Prefix 1st Last 3 "C"-lec-lab Cr. Hrs.  
Digit Digits "L"-Lab

CIP Code (Leave this blank): \_\_\_\_\_

**CGS 2260**

3. Grading Method (select one):  Graded  Pass/Fail

4a. Course Title IT Fundamentals

b. Abbreviated course Title (for computer class schedules, transcripts) IT Fundamentals

LIMITED TO 25 Characters (including spaces)

5. Statewide Course Numbering Subject Matter Area CGS (Computer General Studies)

6. Catalog Description/Major Topics (not to exceed 200 characters including spaces)

*College of Medicine and College of Law: Attach description not exceeding 1,000 characters including spaces.*

This course is designed to prepare students with the required knowledge to design, assemble and install the hardware and software needs of an organization. Not acceptable for SCIS majors.

7. Attach detailed syllabus course outline and course justification on separate page(s).

8. Prerequisite(s): None

9. Corequisite(s): None

10. Objective(s) of Course:

Please see the attached syllabus.

11. Does this course duplicate/overlap other courses at FIU?  No  Yes

If yes, please explain: n/a

12. What other closely related department(s) have been consulted about this course?

n/a

13. Is this course used for the assessment of a program or a certificate (if yes, then send a notification to [assessment@fiu.edu](mailto:assessment@fiu.edu))?  No  Yes

PROPOSAL REQUESTED BY:

Faculty Contact Michael Robinson 11 / 25 / 2019

(Type name)

(Signature)

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(Email address)

(Phone number)

Chairperson (Dept./Div.) S.S. Iyengar

(Type name)

(Signature)

11 / 25 / 2019

Chairperson (Curr. Comm.) Wei-Chiang Lin

(Type name)

(Signature)

/ / 2019

College/School Dean John Volakis

(Type name)

(Signature)

12 / 10 / 2019

Submit one original form. Attach one copy of the course justification and course syllabus, course description, objectives, major topics and textbooks.

## **IT Fundamentals - Course Justification**

FIU Embrace is a university-wide initiative that promotes health, wellness, and overall functioning for adults with developmental disabilities, such as autism spectrum disorder (ASD), intellectual disabilities (ID), and other neurodevelopmental disorders (OND). It seeks to help these persons lead healthy lives and maximize their individual potential across their lifespan.

FIU Embrace utilizes a person-focused, household-centric approach, recognizing that people with developmental disabilities deserve to be treated as individuals with personal patterns of talents and challenges. Through education and dissemination, services, and research opportunities, we strive to positively impact the lives of individuals affected by developmental disabilities, their families, and learners. FIU Embrace is a part of the Office of Research and Economic Development (ORED), and is an initiative consistent with the University's vision for inclusion and embracing the diversity of our Miami community.

This new course IT Fundamentals is a required course for the FIU Embrace Technology Certification Program (as shown in the course flowchart of this program) and is not acceptable for SCIS majors.

**School of Computing and Information Science**

**Course Title:** IT Fundamental

**Date:** 11/22/2019

**Course Number:** CGS 2XXX

**Number of Credits:** 3

<b>Subject Area:</b> IT Certifications	<b>Subject Area Coordinator:</b> Michael Robinson <b>email:</b> michael.robinson@cs.fiu.edu
<b>Catalog Description:</b> This course is designed to prepare students with the required knowledge to design, assemble and install the hardware and software needs of an organization. Not acceptable for SCIS majors.	
<b>Textbook:</b> None. Reading materials will be distributed throughout the semester	
<b>References:</b> Online resources	
<b>Prerequisite Courses:</b> None	
<b>Corequisite Courses:</b> None	

**Type:** Required for Embrace.

**Audience:** For non-SCIS undergraduate students will be exposed to the course materials listed in the course outline. Students from any non-SCIS majors are accepted.

**Prerequisite Topics:**

- None

**Course Outcomes:**

Students who successfully complete this course will be able to:

1. Be familiar with the Fundamentals in the IT industry.
2. Be familiar with the design, construction, upgrades, repairs, and warranties steps of Clients/Workstations computers.
3. Be familiar with the design, construction, upgrades, repairs, and warranties steps of Laptop computers.
4. Be familiar with how CAT network cables are made.
5. Be familiar with the design, construction, upgrades, repairs, and warranties steps of Server computers.
6. Master installation and setup of Operating Systems and user software.
7. Be familiar with the design, construction, installation, and maintenance of computer networks.
8. Be exposed to A+ 1001 rules and concepts.

**Outline:**

<b>Topic</b>	<b><u>Hours (Total: 37.5 hours = 15 weeks * 2 lectures/week * 1.25 hrs/lecture)</u></b>	<b><u>Outcome</u></b>
1. Introduction: Why IT Fundamentals?	1	<u>1</u>
2. Clients/Workstations: Design and Construction from the Ground up, upgrades, repairs, and warranties.	3	<u>1,2</u>
3. Laptops: Design and Construction from the Ground up, upgrades repairs, and warranties.	3	<u>1,3</u>
4. Understanding and making CAT Cables using RJ45 connectors and multiple tools	2	<u>1,4</u>
5. Servers: Understanding the Design and Construction from the Ground up, upgrades repairs, and warranties.	1	<u>1,5</u>
6. Servers Operating Systems Installation.	1	<u>1,6</u>
7. Servers Creating users and rights.	2	<u>1,6</u>
8. Clients/Nodes Operating Systems Installation.	2	<u>1,6</u>
9. Clients/Nodes Software Installation.	2	<u>1,6</u>
10. Connecting Servers to Switches.	.5	<u>1,6</u>
11. Connecting Clients/Nodes to Switches.	.5	<u>1,2,3,6</u>
12. Installing and connection Power Backups.	.5	<u>1,7</u>
13. Printers Network/Local cabling and installations	1.5	<u>1,7</u>
14. Making 3 Unique Server Quotes	2	<u>1,5,7</u>
15. Desktops, Laptops, A+ 1001 sect 0 & 1.1	2	<u>1,8</u>
16. Laptops A+ 1001 sect 1.2 thru 1.7	2	<u>1,8</u>
17. Covering A+ 1001 sect 2.1 thru 2.4	2	<u>1,8</u>
18. Covering A+ 1001 sect 2.5 thru 2.8	2	<u>1,8</u>