ITNS 1400: Fiber Optics Technician Prep

A. COURSE DESCRIPTION

Credits: 1
Lecture Hours/Week: *.*
Lab Hours/Week: 1
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

Fiber Optics Technician Prep provides instruction with hands on fiber optics splicing and terminations. Individuals will be prepared to meet the Certified Fiber Optic Technician (CFOT) exam requirements.

B. COURSE EFFECTIVE DATES: 01/09/2017 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Fiber Optic Cables
2. Connectors & Interconnection Hardware
3. Splicing Fiber Optic Fibers
4. Safety and Hazards While Using Fiber Optic Cabling

D. LEARNING OUTCOMES (General)

1. Students will explain impedance, attenuation, return loss & propagation.
2. Students will explain cable lengths.
3. Students will interpret the advantages of fiber optics.
4. Students will troubleshoot transmitters and receivers.
5. Students will describe lasers and led's.
6. Students will explain vcse's.
7. Students will troubleshoot detectors.
8. Students will explain fiber vs copper (the debate).
9. Students will describe compatibilities.
10. Students will verify data connectors.
11. Students will demonstrate fiber optic connectors.
12. Students will analyze patch panels.
13. Students will describe application guidelines.
14. Students will verify fault tolerance.
15. Students will explain Installation planning.
16. Students will interpret cable specifications.
17. Students will termination of fiber.
18. Students will troubleshoot fiber.
19. Students will troubleshoot a fiber link.
20. Students will demonstrate network documentation.
E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   STUDENT CONTRIBUTIONS:
   METHODS FOR EVALUATING STUDENT LEARNING:
   The students final grade is determined by grades earned on lab exams, written assignments, periodic quizzes, attendance, and written examinations.
   SPECIAL INFORMATION:
   A textbook is available in the college bookstore. Because of the rapid changes in hardware and the vast selection of textbooks available, a regular evaluation of available books is completed.

AASC Approval Date:
February 15, 2017

Review Date:
February 2022