



INTERNATIONAL
TECHNOLOGICAL
UNIVERSITY

NEW NUGGET COURSE

IDS 552 2 Safety-critical Software with Ada

9/19/2020 - 11/14/2020
Sat 9:00 AM-12:00 PM
2:00 PM -4:00 PM

Instructor:
Dr Richard Riehle

Course Description

6 Week Course 4hrs / Week

The Ada language is more of an engineering tool than just a programming tool. It is used by the military for embedded weapon systems such as the F-22 airplane, various missiles, and other weapons. It is also used for Air Traffic Control systems around the World. In France it is used extensively for transportation (e.g., rail) and energy systems. In China it is used for large scale projects by and for the Army. Boeing uses Ada for the avionics software on their new aircraft. Airbus, Fokker and aircraft manufacturers everywhere now use it. Nvidia has recently adopted Ada for its automotive software components. Ada has its niche in the world of safety-critical software, not just in the USA, but in many unexpected applications. Ada is best used in safety-critical environments and is not common in business, banking, web design or in everyday programming.

Instructor: Dr Richard Riehle



Dr. Richard D. Riehle is a professor at ITU and a visiting professor at Naval Postgraduate School. He has been creating and managing software activities since the early 1960's. His software engineering experience spans both military and civilian applications. In the military realm, he has been an active participant on some projects (command and control, etc.), and a shirt-sleeves consultant on others. Civilian software experience spans the full range of commercial enterprises: hospital information systems, banking, insurance, wholesale distribution, and medical billing, to name a few. Beginning in the late 1980's, Dr. Riehle's focus turned to software consulting and training. As a trainer, he conducted courses of his own design in Ada, C++, software methods, and object-oriented development.

He received a Bachelor's degree from Brigham Young University and a MSSE from National University. He also earned a doctorate in software Engineering from Naval Postgraduate School.

Textbook:
Ada Distilled,
Dr. Richard Riehle

www.adaic.org › learn › materials

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