

Structured Decision-Making in an Unstructured, Complex, Changing World

(taught in English)

Module Number: AW-0 0 4800.M

<u>Lecturer:</u> ShiaoFong Yin

ECTS-credits: 5

Workload: 150 h (approx. 60 class and 90 self-study)

(1 ECTS = 30 h)

<u>Contact hours (SWS):</u> 4 hours per week

<u>Learning objectives:</u> Armed with the tools of critical thinking, problem-solving and deci-

sion-making, students will become comfortable with uncertainty and confident in their approach to business and operational strategy faced with complex, ambiguous and volatile market conditions.

Content: There are no answer books in real life; Problems come in pairs, or

more; Change will change. This course will provide students with a process for problem-solving and decision-making, knowledge about cognitive biases/fallacies which can derail "good" decision making with tools for their mitigation, and methods for quantifying risks. We will start by understanding how humans think, analyze and decide; we will conclude with how Machine Learning and Artificial Intelligence tries to emulate the human process using the decision-making tools taught in class. The class is structured as 20% lecture and 80% in-class exercises. 60-90 minutes pre-work per week will

be required to maximize in class discussions and exercises.

Language of instruction: English

<u>Requirements:</u> English level B2

<u>Material:</u> Videos, Readings, Case Studies provided by Instructor

Participants: Max. 25

<u>Examination:</u> Written exam / PSTA