







# DEVELOPMENT EVALUATIONS Administration

Prof. dr. Jernej Klemenc

#### Univerza *v Ljubljani* Fakulteta *za strojništvo*

#### **Basic facts**



No. of lecture hours: 45

No. of exercise hours: 30

Beginning of lectures: 13:00

Lecturers: prof.dr. Jernej Klemenc / doc.dr. Domen Šeruga

Lecturers' rooms: 508 / 509

- Tel.: +386-(0)1-4771504 / +386-(0)1-4771743

– E-mails: jernej.klemenc@fs.uni-lj.si

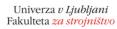
domen.seruga@fs.uni-lj.si

Assistant: as.dr. Aleš Gosar

Assistant's room: IV/5B

- Tel.: **+386-(0)1-4771176** 

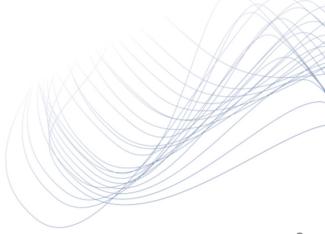
– E-mail: <u>ales.gosar@fs.uni-lj.si</u>

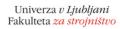




# Study rules

- 2 colloquia (partial exams) from theoretical content.
- Obligatory presence at exercises is 80%.
- Positive grade from exercises is a prerequisite for attending the written and oral (optional) part of the exam at the end of the course.

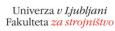






# Study rules

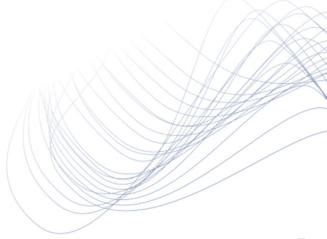
- How to pass the "Effectiveness of Products" course:
  - (1) An average grade from colloquia is bigger or equal to 5.01, with no grade less than 4.5. To get the grade in VIS information system, a student needs to enrol her/himself for the course exam until the end of the school year.
  - (2) The average grade from colloquia is less than 5.01 and one colloquium is positive, i.e. grade bigger than 5.01. At the first exam to which the student is enrolled only a content of the worse colloquium is checked.
  - (3) Although present, a student was not successful at the two colloquia as described in options (1) or (2) and got a cumulative grade of 5.01 or more. At the first exam to which the student is enrolled only the theoretical content of the course is checked. The student receives no questions related to the exercies.
  - (4) Full exam proof: theoretical content and exercises.

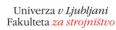


### **Course content**



- Introduction
- V-model for system engineering
- Basic reliability models
- Reliability of systems
- Physical reliability models
- Design for reliability
- Maintainability of systems
- Design for maintainability





## **List of references**



- Nagode M., Oman S., Šeruga D.: Development evaluations
   Lecture templates. Ljubljana: UL-FME, 2019.
- RMS Reliability, Maintainability and Supportability Handbook, 3rd edition. SAE International, 1995.
- Ebeling C.E.: An Introduction to Reliability and Maintainability Engineering, 2nd edition. Illinois: Waveland Press, 2010.
- O'Connor P., Kleyner A.: Practical reliability engineering, 5th ed. New York: John Willey & Sons, 2012.

