Structured Electronic Design

EE4109 Course information

Anton J.M. Montagne

Objective

Objective

To master the transistor-level design of application-specific amplifiers

Objective

To master the transistor-level design of application-specific amplifiers

Method

Objective

To master the transistor-level design of application-specific amplifiers

Method

Presentation and explanation of a structured design method

To master the transistor-level design of application-specific amplifiers

Method

Presentation and explanation of a structured design method Stepwise application of this theory in the design of an active antenna

To master the transistor-level design of application-specific amplifiers

Method

Presentation and explanation of a structured design method Stepwise application of this theory in the design of an active antenna

Means

To master the transistor-level design of application-specific amplifiers

Method

Presentation and explanation of a structured design method Stepwise application of this theory in the design of an active antenna

Means

Course website

To master the transistor-level design of application-specific amplifiers

Method

Presentation and explanation of a structured design method Stepwise application of this theory in the design of an active antenna

Means

Course website Web lectures (will be recorded and published)

To master the transistor-level design of application-specific amplifiers

Method

Presentation and explanation of a structured design method Stepwise application of this theory in the design of an active antenna

Means

Course website Web lectures (will be recorded and published) Book: A. Montagne Structured Electronic Design, edition 1.2 (DAP)

To master the transistor-level design of application-specific amplifiers

Method

Presentation and explanation of a structured design method Stepwise application of this theory in the design of an active antenna

Means

Course website Web lectures (will be recorded and published) Book: A. Montagne Structured Electronic Design, edition 1.2 (DAP) **Demonstrations**

To master the transistor-level design of application-specific amplifiers

Method

Presentation and explanation of a structured design method Stepwise application of this theory in the design of an active antenna

Means

Course website Web lectures (will be recorded and published) Book: A. Montagne Structured Electronic Design, edition 1.2 (DAP) Demonstrations Examples of isolated and combined design problems

To master the transistor-level design of application-specific amplifiers

Method

Presentation and explanation of a structured design method Stepwise application of this theory in the design of an active antenna

Means

Course website Web lectures (will be recorded and published) Book: A. Montagne Structured Electronic Design, edition 1.2 (DAP) Demonstrations Examples of isolated and combined design problems Polls and quizzes (Brightspace)

To master the transistor-level design of application-specific amplifiers

Method

Presentation and explanation of a structured design method Stepwise application of this theory in the design of an active antenna

Means

Course website Web lectures (will be recorded and published) Book: A. Montagne Structured Electronic Design, edition 1.2 (DAP) Demonstrations Examples of isolated and combined design problems Polls and quizzes (Brightspace) Exercises (Brightspace)

To master the transistor-level design of application-specific amplifiers

Method

Presentation and explanation of a structured design method Stepwise application of this theory in the design of an active antenna

Means

Course website Web lectures (will be recorded and published) Book: A. Montagne Structured Electronic Design, edition 1.2 (DAP) Demonstrations Examples of isolated and combined design problems Polls and quizzes (Brightspace) Exercises (Brightspace) Design discussions (mini master classes)

To master the transistor-level design of application-specific amplifiers

Method

Presentation and explanation of a structured design method Stepwise application of this theory in the design of an active antenna

Means

Course website Web lectures (will be recorded and published) Book: A. Montagne Structured Electronic Design, edition 1.2 (DAP) Demonstrations Examples of isolated and combined design problems Polls and quizzes (Brightspace) Exercises (Brightspace) Design discussions (mini master classes)

Symbolic circuit analysis

Symbolic circuit analysis

Symbolic Linear Circuit Analysis Program

(c) 2020 A.J.M. Montagne 20

Symbolic circuit analysis

Symbolic Linear Circuit Analysis Program

MATLAB/MuPAD version 0.6 (Book examples)

Symbolic circuit analysis

Symbolic Linear Circuit Analysis Program

MATLAB/MuPAD version 0.6 (Book examples)

Python/Maxima version 1.0 (New, compatible with Jupyter Notebooks)

Symbolic circuit analysis

Symbolic Linear Circuit Analysis Program

MATLAB/MuPAD version 0.6 (Book examples)

Python/Maxima version 1.0 (New, compatible with Jupyter Notebooks)

https://www.analog-electronics.eu/slicap/slicap.html

ith Jupyter Notebooks) <mark>html</mark>

Symbolic circuit analysis

Symbolic Linear Circuit Analysis Program

MATLAB/MuPAD version 0.6 (Book examples)

Python/Maxima version 1.0 (New, compatible with Jupyter Notebooks)

https://www.analog-electronics.eu/slicap/slicap.html

Numeric circuit analysis

Symbolic circuit analysis

Symbolic Linear Circuit Analysis Program

MATLAB/MuPAD version 0.6 (Book examples)

Python/Maxima version 1.0 (New, compatible with Jupyter Notebooks)

https://www.analog-electronics.eu/slicap/slicap.html

Numeric circuit analysis LTspice

Symbolic circuit analysis

Symbolic Linear Circuit Analysis Program

MATLAB/MuPAD version 0.6 (Book examples)

Python/Maxima version 1.0 (New, compatible with Jupyter Notebooks)

https://www.analog-electronics.eu/slicap/slicap.html

Numeric circuit analysis LTspice

MOS CMOS18 library (Book examples and antenna design)

Symbolic circuit analysis

Symbolic Linear Circuit Analysis Program

MATLAB/MuPAD version 0.6 (Book examples)

Python/Maxima version 1.0 (New, compatible with Jupyter Notebooks)

https://www.analog-electronics.eu/slicap/slicap.html

Numeric circuit analysis

LTspice

MOS CMOS18 library (Book examples and antenna design) Jupyter notebook virtual machine for plotting device characteristics

Symbolic circuit analysis

Symbolic Linear Circuit Analysis Program

MATLAB/MuPAD version 0.6 (Book examples)

Python/Maxima version 1.0 (New, compatible with Jupyter Notebooks)

https://www.analog-electronics.eu/slicap/slicap.html

Numeric circuit analysis

LTspice

MOS CMOS18 library (Book examples and antenna design) Jupyter notebook virtual machine for plotting device characteristics

Ir.Dr. C.J.M. (Chris) Verhoeven

Associate Professor TU Delft Robotics Institute / Theme leader Swarm Robots/ Deputy Director Education TU Delft Space Institute / Theme leader Space Robotics

Ir.Dr. C.J.M. (Chris) Verhoeven

Associate Professor TU Delft Robotics Institute / Theme leader Swarm Robots/ Deputy Director Education TU Delft Space Institute / Theme leader Space Robotics

Ir. A.J.M. (Anton) Montagne

Visiting Professor Free-lance consultant analog electronics

Ir.Dr. C.J.M. (Chris) Verhoeven

Associate Professor TU Delft Robotics Institute / Theme leader Swarm Robots/ Deputy Director Education TU Delft Space Institute / Theme leader Space Robotics

Ir. A.J.M. (Anton) Montagne

Visiting Professor Free-lance consultant analog electronics

Contact:

Marion de Vlieger: 015-2786180

Ir.Dr. C.J.M. (Chris) Verhoeven

Associate Professor TU Delft Robotics Institute / Theme leader Swarm Robots/ Deputy Director Education TU Delft Space Institute / Theme leader Space Robotics

Ir. A.J.M. (Anton) Montagne

Visiting Professor Free-lance consultant analog electronics

Contact:

Marion de Vlieger: 015-2786180

Attend the lectures

Attend the lectures Actively participate during the lectures

Attend the lectures Actively participate during the lectures Study the material book

Attend the lectures Actively participate during the lectures Study the material book Make the exercises

Attend the lectures Actively participate during the lectures Study the material book Make the exercises Make the design of the active antenna

Attend the lectures Actively participate during the lectures Study the material book Make the exercises Make the design of the active antenna Go beyond: verify and falsify your own design conclusions

Attend the lectures Actively participate during the lectures Study the material book Make the exercises Make the design of the active antenna Go beyond: verify and falsify your own design conclusions If things are unclear: contact the instructors

Attend the lectures Actively participate during the lectures Study the material book Make the exercises Make the design of the active antenna Go beyond: verify and falsify your own design conclusions If things are unclear: contact the instructors

BSc Electrical Engineering

BSc Electrical Engineering EE3C11: see homologation program

BSc Electrical Engineering EE3C11: see homologation program

Homework quizzes

Homework quizzes
Design active antenna

Homework quizzes Design active antenna Exam quizz

Homework quizzes Design active antenna Exam quizz