WCE–RAN Schedule — 1st Year

Autumn 2021
Periods 1-2

- Numerical Matrix Analysis (5 cr, 1 p)
- Statistical Signal Processing I (5 cr, 1 p)
- Wireless Communications I (5 cr, 1 p)
- Multiantenna Communications (5 cr, 1 p)**
- Channel Coding & Modul. (5 cr, 1p)**
- Survival Finnish Course (2 cr, 1 p)***
- Basic Studies (all 42 cr obligatory)
- Introduction to Optimization (5 cr, 2 p)
- Communications Networks I (5 cr, 2 p)
- Radio Channels (5 cr, 2 p)
- Simulations & Tools for Telecom. (5 cr, 2 p)
- Advanced Studies (choose ≥ 28 cr)

Spring 2022
Periods 3-4

- Communications Networks II (7 cr, 3-4 p)
- Wireless Body Area networks (5 cr, 3-4 p) *
- Statistical Signal Processing II (5 cr, 3 p)
- Antennas (5 cr, 4 p)
- Wireless Communications II (5 cr, 3 p)
- Advanced Practical Training (3 cr) (recommended in summer 2022, training report will be done on autumn 2022 term)
- Finnish Language studies (2-10 cr) and/or optional studies depending on personal study plan (PSP)
- Optional Studies (choose ≥ 17 cr)
- Other Mandatory Studies 33 cr

*) = will be lectured on even years (2022, 2024)  **) = will be lectured on odd years (2021, 2023)  *** = choose period 1. or 2.

2021-2023 WCE study Guide
WCE–RAN Schedule — 2nd Year

Autumn 2022
Periods 1-2

- Telecommunication Engineering Project (5 cr) or
  Electronics Design and Construction Exercise
  (6 cr, 1-2 p) (one of these can be chosen as advanced course)
- Information Theory (5 cr, 1 p) *
- Statistical Commun. Theory (7 cr, 1-2 p) *
- Convex Optimization (7 cr, 1-2 p) *
- Signal Processing Systems (5 cr, 2 p)

Spring 2023
Periods 3-4

- Master’s Thesis Work
  (30 cr, 3-4 p)
  (5 cr, 4 p) **
- Electronics and Communications
  Engineering Seminar
  (0 cr, 4 p)
- Maturity Test for
  Master’s Degree
  (0 cr, 4 p)

Finnish Language studies (2-10 cr) and/or optional studies depending on personal study plan (PSP)

- Basic Studies
  (all 42 cr obligatory)
- Advanced Studies
  (choose ≥ 28 cr)
- Optional Studies
  (choose ≥ 17 cr)
- Other Mandatory Studies 33 cr

* = will be lectured on even years (2022, 2024)
** = will be lectured on odd years (2021, 2023)
*** = choose period 1. or 2.

2021-2023 WCE study Guide
### WCE–RF Schedule – 1st Year

#### Autumn 2021
**Periods 1-2**

- **Statistical Signal Processing I** (5 cr, 1 p)
- **Electronics Design II** (6 cr, 1 p)
- **Wireless Commun. I** (5 cr, 1 p)
- **Survival Finnish Course** (2 cr, 1 p) ***

#### Spring 2022
**Periods 3-4**

- **Radio Engineering I** (5 cr, 2 p)
- **Electronics Design III** (6 cr, 2 p)
- **Radio Channels** (5 cr, 2 p)
- **Survival Finnish Course** (2 cr, 2 p) ***

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#### Basic Studies
(all 38 cr obligatory)

#### Advanced Studies
(choose ≥ 33/34 cr)

#### Optional Studies
(choose ≥ 16/15 cr)

#### Other Mandatory Studies 33 cr

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2021-2023 WCE study Guide
WCE–RF Schedule — 2nd Year

Autumn 2022
Periods 1-2

Telecommunication Engineering Project (5 cr) or Electronics Design and Construction Exercise (6 cr, 1-2 p) (one of these is obligatory)

Electronic System Design (5 cr, 1 p)

Telecommunications Circuit Design (6 cr, 1 p)

Finnish Language studies (2-10 cr) and/or optional studies depending on personal study plan (PSP)

Spring 2023
Periods 3-4

Master’s Thesis Work (30 cr, 3-4 p)

Electronics and Communications Engineering Seminar (0 cr, 4 p)

Maturity Test for Master’s Degree (0 cr, 4 p)

Basic Studies (all 38 cr obligatory)

Advanced Studies (choose ≥ 33/34 cr)

Optional Studies (choose ≥ 16/15 cr)

Other Mandatory Studies 33 cr

* = will be lectured on even years (2022, 2024)  ** = will be lectured on odd years (2021, 2023)  *** = choose period 1. or 2.

2021-2023 WCE study Guide