

# Official Transcript of Records

**Print date**  
2024-02-19

| Name            | Personal identity number |
|-----------------|--------------------------|
| Palatip Jopanya | 19910114-8519            |

## Completed courses

| Name                                                                     | Scope   | Grade | Date       | Note |
|--------------------------------------------------------------------------|---------|-------|------------|------|
| Detection and Estimation of Signals                                      | 6.0 hp  | 4     | 2022-10-30 | 1    |
| Signal Theory                                                            | 6.0 hp  | 4     | 2022-12-16 | 1    |
| Digital Communication                                                    | 6.0 hp  | 5     | 2023-01-09 | 1    |
| Digital Signal Processing                                                | 6.0 hp  | 3     | 2023-01-17 | 1    |
| Complex networks and big data                                            | 6.0 hp  | 5     | 2023-01-20 | 1    |
| Signal Processing for Communications                                     | 6.0 hp  | G     | 2023-06-02 | 2    |
| Wireless Communications                                                  | 6.0 hp  | 5     | 2023-06-05 | 1    |
| Data Compression                                                         | 6.0 hp  | 3     | 2023-06-08 | 1    |
| Communication, Ethics and Sustainable Development                        | 6.0 hp  | 5     | 2023-06-14 | 1    |
| Multiple Antenna Communications                                          | 6.0 hp  | 5     | 2023-06-16 | 1    |
| Cryptology                                                               | 6.0 hp  | 5     | 2024-01-02 | 1    |
| Information Networks                                                     | 6.0 hp  | 4     | 2024-01-04 | 1    |
| Modern Channel Coding, Inference and Learning                            | 6.0 hp  | 5     | 2024-01-17 | 1    |
| Project Course in Signal Processing, Communications and Networking, CDIO | 12.0 hp | G     | 2024-02-16 | 2    |

## Parts of uncompleted courses

| Name                                     | Scope    | Grade | Date       | Note |
|------------------------------------------|----------|-------|------------|------|
| <b>Attendance at Thesis Presentation</b> | (0.0 hp) |       |            |      |
| Attendance at Thesis Presentation        | 0.0 hp   | D     | 2023-12-22 | 3    |

## Summation

| Total   | included credited parts | Credited education |
|---------|-------------------------|--------------------|
| 90.0 hp |                         |                    |

## Notes and information

60 credits (hp) represent a full academic year. The system is compatible with ECTS credits (the European Credit Transfer System) as one credit is equal to one ECTS credit.

- 1 Grading scale: Pass with distinction (5), Pass with credit (4), Pass (3), Fail (U), Fail (1)
- 2 Grading scale: Pass (G), Fail (U), Fail (1)
- 3 Grading scale: Attended (D), Fail (U)

The above is an excerpt from the student registry.