

**BESTrip at Telkom University,
Bandung, Indonesia
30 July - 4 August 2018**

Summer School For Coding Theory & Signal Processing In 5G Era (CODERA 2018)

Supported By
IEEE
Signal Processing
Indonesia Chapter

Organized By
**Telkom
University**

How To Apply

• Registration Dates:

1. Advance registration dates:
15 April - 15 May
2. Late registration dates:
16 May – 30 June 2018

• Registration Form and documentation in:

bestrip.telkomuniversity.ac.id

• Registration Steps:

1. Visit website:
bestrip.telkomuniversity.ac.id
2. Download application form:
bestrip.telkomuniversity.ac.id/registration
3. Submit application by email to:
info@io.telkomuniversity.ac.id
and cc to:
nachwanma@telkomuniversity.ac.id
4. Complete payment:
Bank BNI Virtual Account
Cabang Perintis Kemerdekaan,
account number 8321066201800008
named BESTrip – Universitas
Telkom. Please add virtual account
fee Rp. 2.500,- on each transfer
- 5) Receive Acceptance Letter: Receive
the acceptance letter from us
through email.

• Fees:

Scheme	Advance Registration by May 15	Late Registration from May 16	Inclusion
Full	Rp 14,030,000	Rp 16,500,000	Short course, accommodation, local transport, Bandung tour, Bali tour, lunch, dinner
Limited	Rp 11,030,000	Rp 13,500,000	Short course, accommodation, local transport, Bandung tour, lunch
Course only	Rp 5,500,000	Rp 6,500,000	Short course, lunch

Fakultas Teknik Elektro
School of Electrical Engineering
Telkom University

AdWitech center for
Telkom University

ICAO
International Class Academic Office

Telkom University
International Office

DEA
Dedicated Enrollment and Admission

The Summer School for Coding Theory and Signal Processing in 5G Era (CODERA 2018) will be held at Telkom University, Bandung, Indonesia. Participants will develop research projects in the coding theory and signal processing field under the supervision of world-class professors and experienced researchers. The balance between lectures and case of studies will give you a comprehensive overview of the engineering research challenges for the future in 5G era.

The benefits of this summer school are: inspirations and ideas for your thesis or dissertation, research plan consultations, learning new algorithms and methods to improve the performance of any devices, insights of new business and applications in 5G era, and getting internationally immersed class from international lecturers and researchers.

Course Descriptions

- 6 effective days , 3 SKS or 4 ECTS
- Language: English
- Capacity: 50 seats

Who Should Attend

- ICT researchers and lecturers;
- Doctors and PhD candidates;
- Researchers at R&D institutes;
- Graduates and under-graduate students who want to study abroad;
- People who are involved in the formulation of ICT regulation

Lecturers



Dr. Eng. Khoirul Anwar
Telkom University, Indonesia



Prof. Dr. Ing. Stephan ten Brink
University of Stuttgart, Germany



Prof. Ryuji Kohno *
Yokohama National University,
Japan
* In confirmation



Dr. Taufiq Asyhari
Cranfield University, UK



ARIB

Researcher from Association for
Radio Industries and Business
(ARIB), Japan

Course Contents

1. **Basic Coding Theory for 5G Technology and Research Opportunities:** Channel coding theorem, Basic of Polar codes, Basic of LDPC codes, Basic of Turbo processing, Coded random access for IoT
2. **Fundamentals of MIMO communications:** Capacity and Multiplexing Architectures, Diversity and Multiplexing Tradeoff, Massive MIMO case study for 5G and beyond: Challenges and opportunities.
3. **Optical communication channel characteristics:** in general (multi-mode, single-mode fibers, different dispersion effects, incoherent/coherent communications, historic perspective),
4. **LDPC channel coding** (in particular spatially coupled codes), using, e.g., EXIT chart techniques
5. **Ultra Reliable Wireless Ad-Hoc Networks for 5G and IoT/M2M Applications,** including: Major Applications or Use-Cases, Technical Requirement, International Standardization, Regulatory Science, Business Model, and Research Opportunities,
6. **Best Practice on 5G Business Regulation & Standardization:** Lesson Learned from Japan
7. **Bandung cultural visit & trip to Bali** (optional)

For further information, please visit:

<http://bestrip.telkomuniversity.ac.id>

<http://adwitech.telkomuniversity.ac.id>



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