

IST — Information Science and Technology

Welcome 2025

Tanguy Risset & Johanne Grandemenge & Stéphanie Zeoli



11/09/2025

Table of contents

- 1 Introduction
- 2 Information Science & Technology (in TD F)
- 3 5TC courses: Telecommunication Department
- 4 Integration at INSA

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- 2 Information Science & Technology (in TD F)
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TC - International Relations Office

- **Tanguy Risset** <Tanguy.Risset@insa-lyon.fr>
Professor @INSA Lyon, CITI, INRIA
Head of International Relations @TC
IST program coordinator
(Pedagogical questions, research projects)
Office at Citi lab (need special access)
- **Zeoli Stéphanie** <stephanie.zeoli@insa-lyon.fr>
Technical training assistant for
International Relations @TC **coming back today**
Office at TD administration: 2nd floor of Hedy Lamarr building
Present **Tuesday morning and Friday morning**
- **Johanne Grandemenge** <johanne.grandemenge@insa-lyon.fr>
was Technical training assistant for
International Relations @TC **up to today**

Exchange semester at Telecommunication Dept

- Two types of courses
 - **IST courses** (Bachelor level), all in English
 - ⇒ IST Semester (IF/TC/GE)
 - **5TC courses** (Master level), check for english
 - ⇒ TC Dept Semester
- Plus Minor Dept Courses (IF, GEN, etc.)
 - ⇒ See with **Minor Dept. International Relations Coordinator**
- You have validated your learning agreement and you have been registered on all your courses
 - ⇒ **It is not possible to change course now** unless there is a big issue (e.g. strong scheduling conflict between major and minor department)).
 - ⇒ **Please follow all the courses** you are registered to and **only these ones** (see monDossier on the web)
 - Timetables on <https://tc-net.insa-lyon.fr/> (**not ADE** used in other departments)

Table of Contents

- 1 Introduction
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Information Science & Technology

Part 1 ($\simeq$ 5 weeks) 15 sept - 24 oct

- Computer Networks: LAN & IP networks (**NET1**)
- Java Programming (**JAV**)
- Assembly Programming (**ASM**)
- Signal and Image Processing - Part1 (**SIP1**)
- Transmission lines and RF systems (**TLRS**)
- Databases (**DBM1**)

Part 2 ($\simeq$ 6 weeks) 3 nov - 12 dec

- Computer Networks: Routing in the Internet (**NET2**)
- Distributed System and Middleware Design (**MID**)
- Wireless Communication Basics (**WCB**)
- Operating Systems (**OPS**)
- Signal and Image Processing - Part1 (**SIP2**)
- Databases (**DBM2**)

Information Science & Technology

- **Syllabus** (course content): <https://www.insa-lyon.fr/fr/information-science-technology-semester-ist>
(https://www.insa-lyon.fr/sites/www.insa-lyon.fr/files/catalog_ist-semester-2025-2026.pdf)
- **Schedule**: <https://tc-net.insa-lyon.fr/>
- **All courses in TD-F**: Heddy Lamarr building
- **Discord server**: <https://discord.gg/kC2yzPRA>
- Plus **Research project** (REP, explained next slide)
- Plus **French courses** (FLE)
- **Exams** at end-October & mid-December (last course)
- Two scenarios for the end:
 - Students **going back home** for Christmas
 - Students **staying in January** for external courses exams / project
- Transcript of record **available only after the jury** (usually in march)

IST Research project (REP)

- Project ($\simeq 100h$) associated with a **researcher in a lab**:
 - **Citi** (<https://citi-lab.fr/>) Affiliated to INRIA
 - **LIRIS** (<https://liris.cnrs.fr/>) Affiliated to CNRS
 - **CREATIS** (<https://www.creatis.insa-lyon.fr/>) Affiliated to CNRS, INSERM.
- All **IST teachers** are researchers in these labs.
- Please **go and ask the teachers** if you have a preferred topic.
- The available topic proposal will be shown on Moodle:
<https://moodle.insa-lyon.fr/course/view.php?id=10209>

Example of Research Project (REP 2024)

- [Simulation of User Association in Cellular Networks](#). Razvan Stanica, razvan.stanica@insa-lyon.fr
- [Training Neural Networks to Predict Imminent Failures of Natural Slopes using Fiber Bundle Model and Co-Detections](#). Frédéric Le Mouël, frederic.le-mouel@insa-lyon.fr
- [From KVM, docker, kubernetes to OpenStack: can we virtualize the network interfaces or only the network services?](#). Frédéric Le Mouël, frederic.le-mouel@insa-lyon.fr
- [Multi-robot cooperation for source localization via gradient estimation](#). Alessandro Renzaglia, alessandro.renzaglia@inria.fr
- [Wi-Fi replay attacks and privacy](#). Mathieu Cunche, mathieu.cunche@insa-lyon.fr
- [Going towards sustainable and frugal Artificial Intelligence](#). Clémentine Gritti, clementine.gritti@insa-lyon.fr
- [Simulation and analysis of a quantum algorithm](#). Claire Gousaud, claire.goursaud@insa-lyon.fr
- [Generative AI for automated FAQ related to INSA procedures](#). Stéphane Frénot, stephane.frenot@insa-lyon.fr
- [Strategies for Handling Noisy Annotations in Deep Learning Vascular Segmentation](#). Odysée Merveille, odyssee.merveille@creatis.insa-lyon.fr

Table of Contents

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TC - Telecommunications department

TC dept: <https://telecom.insa-lyon.fr/en>

- [Engineering diploma](#) after 5 years (2 FIMI + 3 TC)
- Topics:
 - Transmission technologies
 - Computer networks
 - IT
 - Humanities

Concerning [Exchange students](#) (except double diplomas):

- Mostly [5TC courses](#), search 5TC in the catalogue:
- <https://www.insa-lyon.fr/sites/www.insa-lyon.fr/files/catalogue-tc-25-26.pdf>

TC - Telecommunications department

- Courses Dates (included exams):
23th September - 2nd February
- Courses may have **scheduling conflicts** with IST courses
- Welcome by Razmig Kechichian on **Monday 15th Sept.** (8h, room Projet Vitrine)
- Course **Schedule**: <https://tc-net.insa-lyon.fr/>

Table of Contents

- 1 Introduction
- 2 Information Science & Technology (in TD F)
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Integration at INSA

- Sports:
 - ⇒ (leisure sport) **BDE**: <https://bde.insa-lyon.org/>
 - If you need **ECTS credits with sport courses**, contact the Sports Center: <http://intranetcds.insa-lyon.fr>
Contact: Virginie Baraud <virginie.baraud@insa-lyon.fr>
- **INSA Associations** (130+)
<https://portail.asso-insa-lyon.fr/association/botinsa/>
- **Astus** (Telecommunication Dept Students Association)
<https://www.facebook.com/astus.insa>

Useful Links

- Secretary of IST: [Zeoli Stéphanie](mailto:stephanie.zeoli@insa-lyon.fr) <stephanie.zeoli@insa-lyon.fr>
- Head of IST: [Tanguy Risset](mailto:Tanguy.Risset@insa-lyon.fr) <Tanguy.Risset@insa-lyon.fr>
- Secretary for French language department : [Delphine FRADOIS](mailto:delphine.fradois@insa-lyon.fr) <delphine.fradois@insa-lyon.fr>
- Application and accommodation:
<https://www.insa-lyon.fr/en/node/17257>
<welcome@insa-lyon.fr>
<welcome2@insa-lyon.fr>
<welcome3@insa-lyon.fr>

Conclusion

- First IST/5TC courses [next week](#).
- [Come and see us now](#) if you have changes in your learning agreement.
- Do not hesitate to come to [Stéphanie's office](#).
- Choose your [REP project](#) before end of september (2 students per project allowed)
 - In the above list (we will send you the updated list regularly)
 - Ask to IST teachers
- ⇒ inform us by mail when you have chosen your project.
- Check for [scheduling conflicts](#) with other departments or IST/5TC conflicts.
- [Welcome in Lyon!](#)

Conclusion

Thanks for your attention

5TC - courses: detail

- 5TC Courses [in english](#):
 - CDN : Content Delivery Networks
 - IOT : Internet of Things
 - CIT : Cloud IoT
 - NDA : Network Data Analysis
 - SAT : Satellites and Localisation
 - PRJSAT : Satellite Network Project
 - CQN : Quantic Communications
 - PRJCQN : Quantic Communications Project
 - IAV : AI for Computer Vision
 - PRJIAV : AI for Computer Vision Project
 - SVP : Security and Privacy
 - IAR : Artificial Intelligence for Robotics
 - SMR : Multi-Robot Systems
 - PRJROB : Robotics Project
 - RUST : RUST Programming Language

5TC - registered students per courses

CSI	25
SPR	20 + 2
IAR	20 + 1
IAV	20
SMR	19 + 2
AWS	16 + 3
SRS	15 + 1
NDA	15 + 1
RUST	14 + 3
IOT	14 + 8
CDN	14 + 3
SAT	14 + 4
DMO	13 + 1
LLM	13
PRJROB	13 + 1
SVP	10 + 5
PRJIAV	9
RCA	9
CIT	8 + 4
BTC	7 + 1
PRJSAT	7 + 3
CQN	6 + 1
PRJCQN	1

5TC - courses in parallel

- 5TC Courses [in Parallel](#):
CSI
SRS + IAR
AWS + SVP
CIT + IOT
NDA + CQN
IAV + CDN
SAT + LLM
SPR + RUST
RCA + SMR
DMO + PRJSAT + PRJIAV
BTC + PRJCQN + PRJROB

Annex 2: nombre d'inscrit par cours IST 2024

IST-4-ASM	7
IST-4-DBM1	13
IST-4-DBM2	24
IST-4-JAV	11
IST-4-MID	17
IST-4-NET1	22
IST-4-NET2	18
IST-4-OPS	14
IST-4-SIP1	12
IST-4-SIP2	16
IST-4-TLRS	3
IST-4-WCB	7
IST-4-REP	12