



**Advanced RF IC Design**  
**Live Course @ EPFL, Lausanne, Switzerland**  
**JUNE 19-23, 2023**

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**MONDAY, June 19**

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08:30 - 10:00 am	RF Fundamentals and Transceivers	Behzad Razavi
10:30 - 12:00 pm	RF Fundamentals and Transceivers (Cnt'd)	Behzad Razavi
01:30 - 03:00 pm	LNA and Mixer Design	Behzad Razavi
03:30 - 05:00 pm	LNA and Mixer Design (Cnt'd)	Behzad Razavi

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**TUESDAY, June 20**

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08:30 - 10:00 am	Modern Direct-Conversion Receivers	Behzad Razavi
10:30 - 12:00 pm	New Developments in Transceiver Design	Behzad Razavi
01:30 - 03:00 pm	Transistor-Level Design of a 2.4-GHz/5.2-GHz WiFi Receiver	Behzad Razavi
03:30 - 05:00 pm	Case Study of a 6-GHz Receiver for WiFi and LTE	Behzad Razavi

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**WEDNESDAY, June 21**

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08:30 - 10:00 am	Millimeter-Wave VCO Design	Behzad Razavi
10:30 - 12:00 pm	Millimeter-Wave VCO Design (Cnt'd)	Behzad Razavi
01:30 - 03:00 pm	mm-Wave CMOS Circuit Design	Patrick Reynaert
03:30 - 05:00 pm	mm-Wave CMOS Circuit Design (Cnt'd)	Patrick Reynaert

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**THURSDAY, June 22**

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08:30 - 10:00 am	mm-Wave CMOS Circuit Design Examples With Transformers	Patrick Reynaert
10:30 - 12:00 pm	CMOS mm-wave PA Design	Patrick Reynaert
01:30 - 03:00 pm	CMOS mm-wave PA Design (Cnt'd)	Patrick Reynaert
03:30 - 05:00 pm	Common Design-Errors and Layout Mistakes at mm-Wave Frequencies	Patrick Reynaert

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**FRIDAY, June 23**

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08:30 - 10:00 am	Fundamentals of Beamforming for 5G and SATCOM (1)	Hua Wang
10:30 - 12:00 pm	Fundamentals of Beamforming for 5G and SATCOM (2)	Hua Wang
01:30 - 03:00 pm	5G mm-Wave Transmitter Array Design Examples	Hua Wang
03:30 - 05:00 pm	5G Digital Power Amplifiers and Transmitters	Hua Wang

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