Electronic Circuits of Communications

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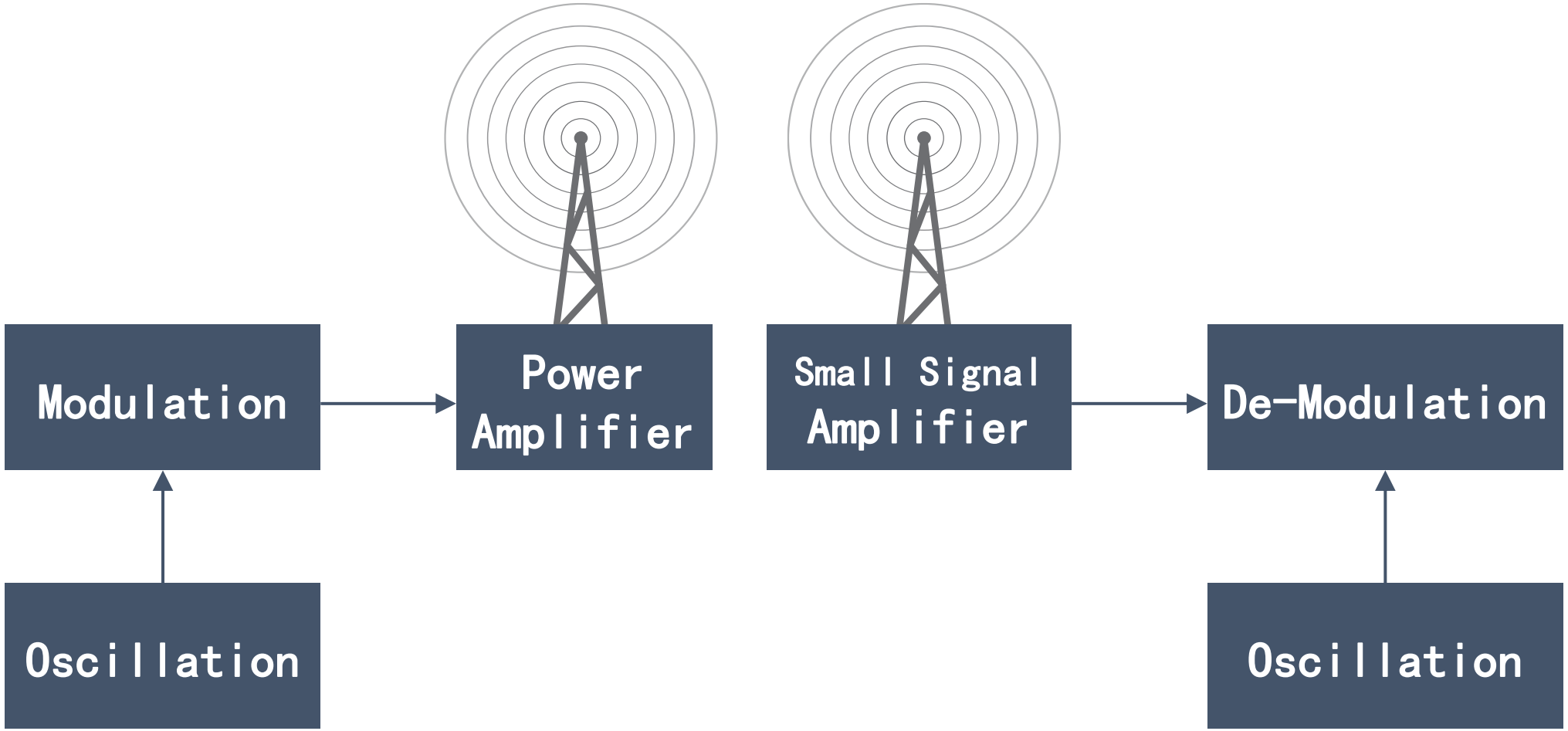
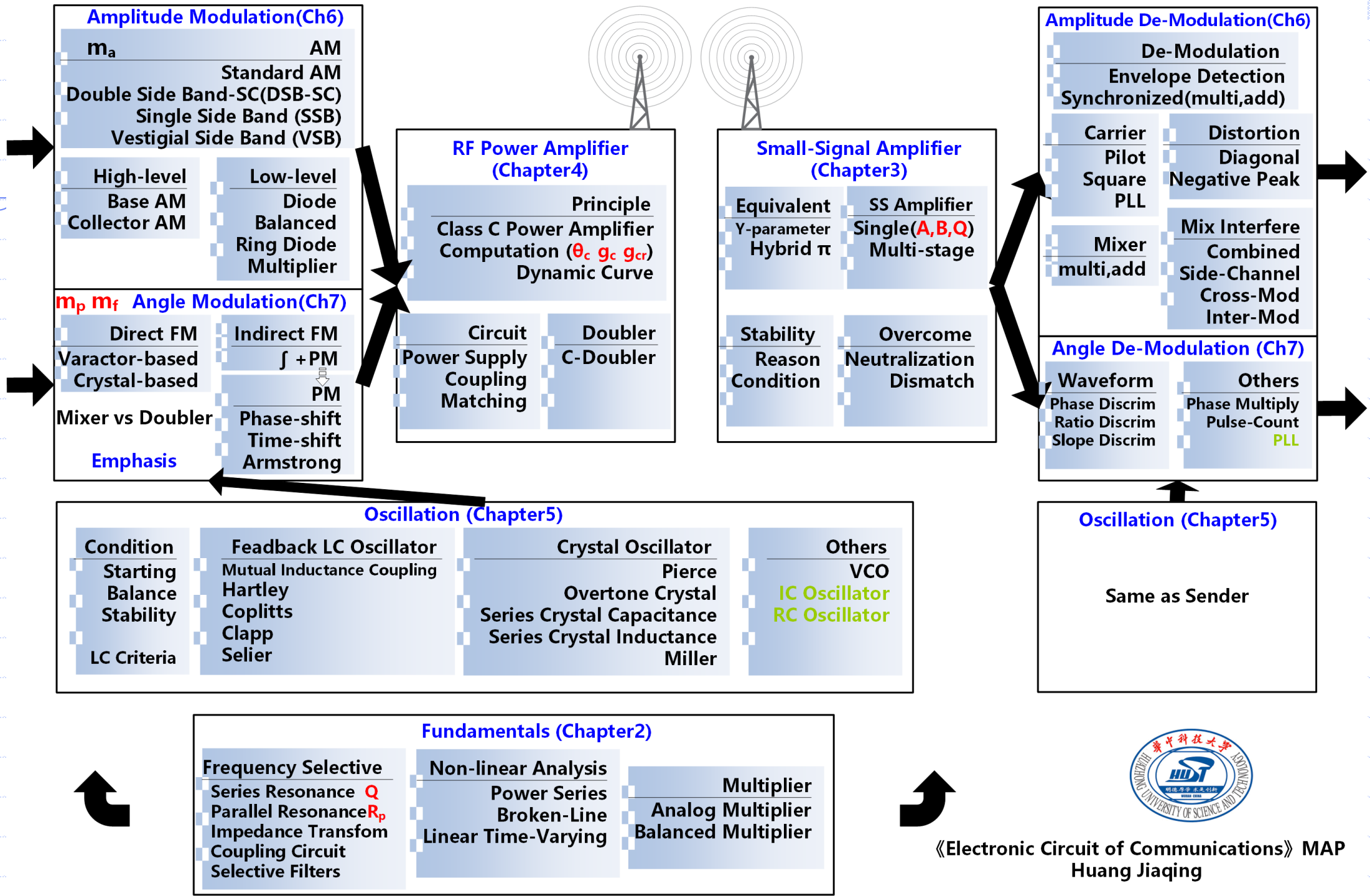
Objectives

- Construct systematic framework



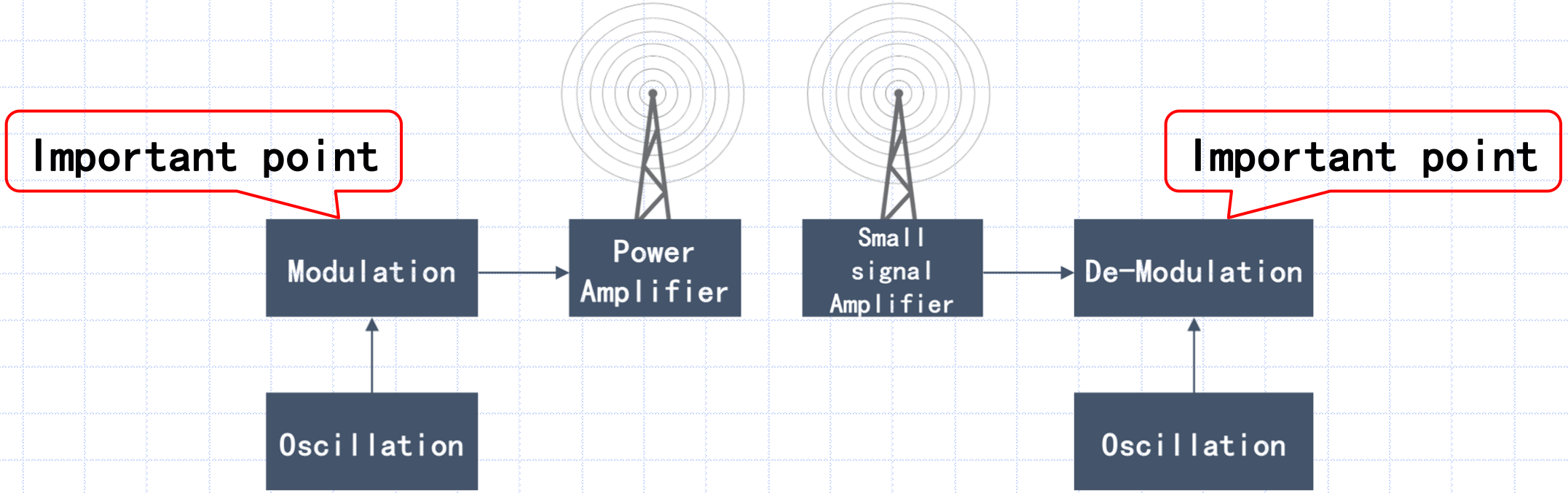


《Electronic Circuit of Communications》 MAP
Huang Jiaqing

Objectives

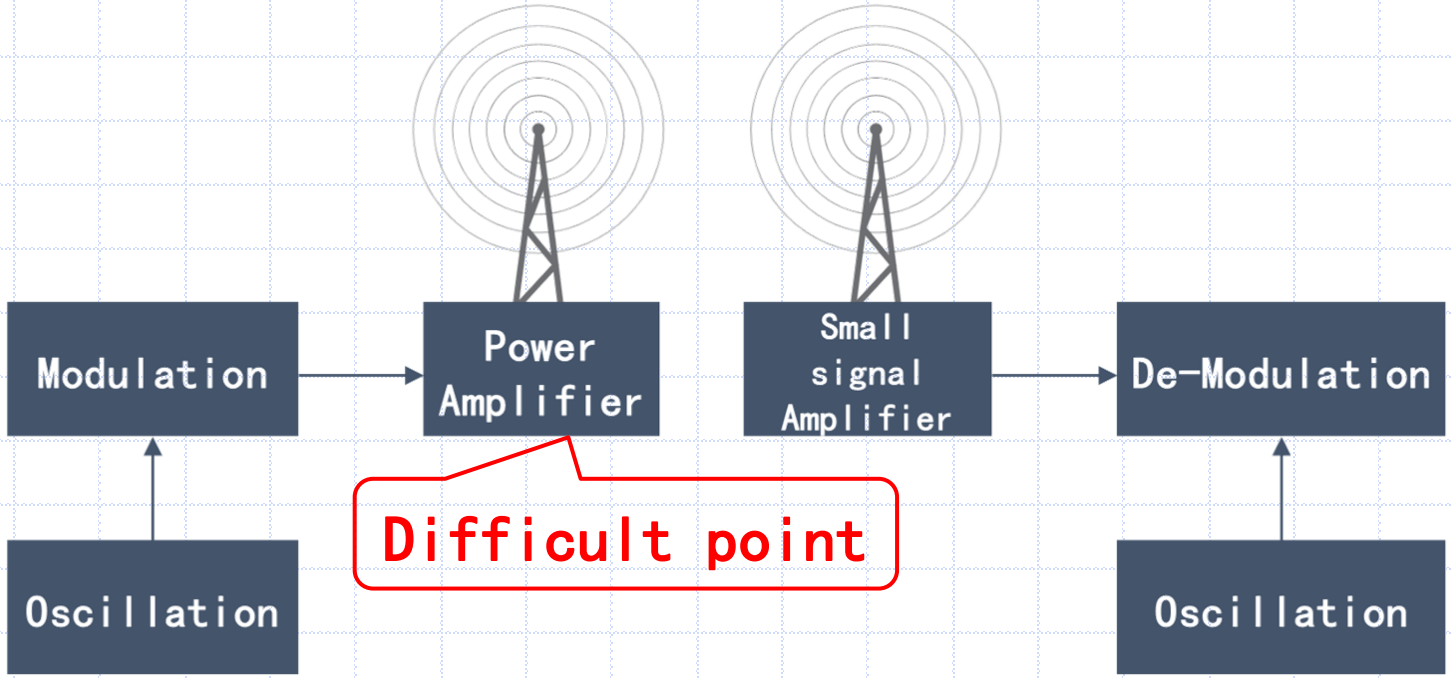
- Construct systematic framework
- Analyze & design elementary RF electronic circuits

Important Points



- Non-linear circuits

Difficult Points

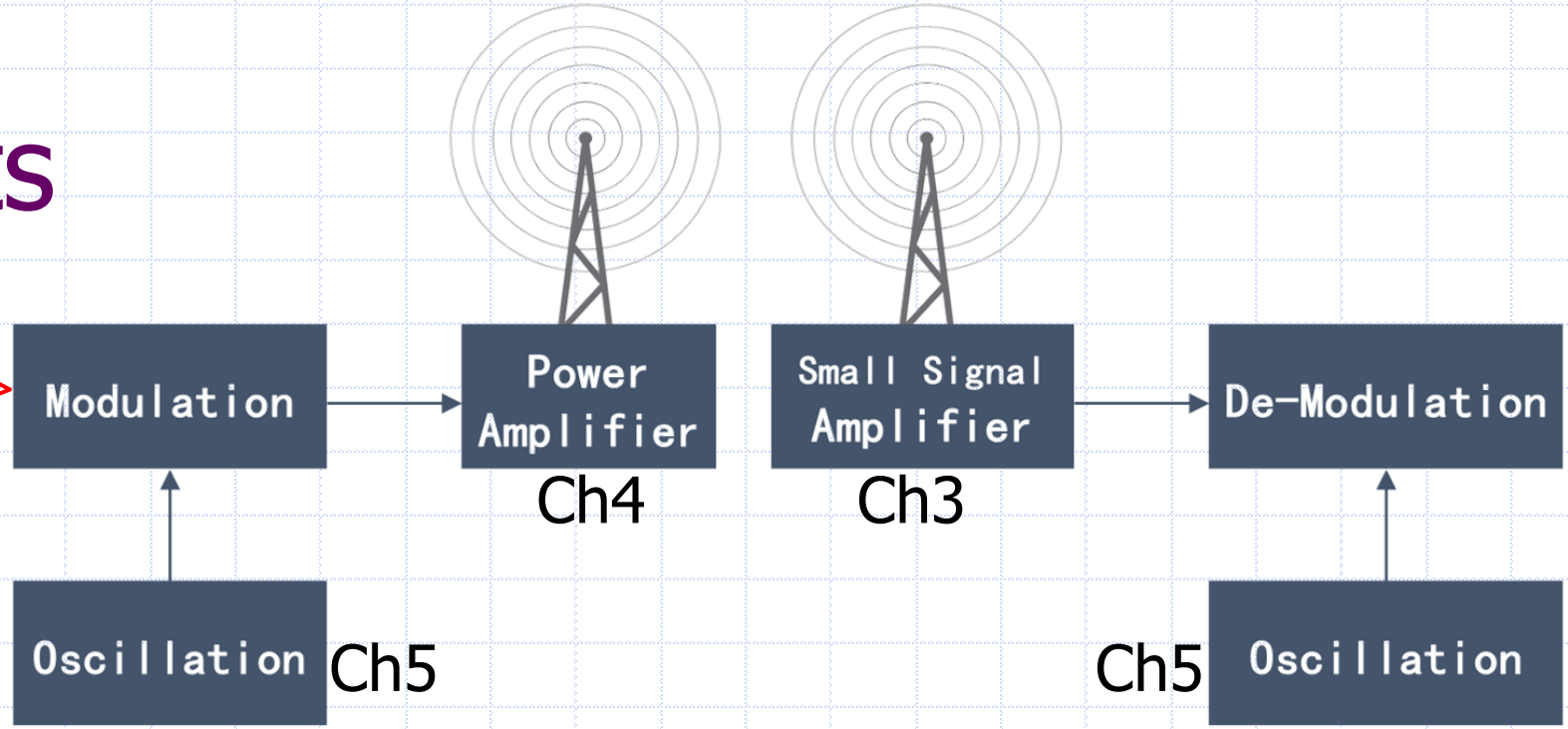


- Difficult Points

  Circuits Analysis（Radio-Frequency Equivalent Circuits）

Main Contents

Amplitude Modulation(AM) Ch6
Angle Modulation (FM/PM) Ch7

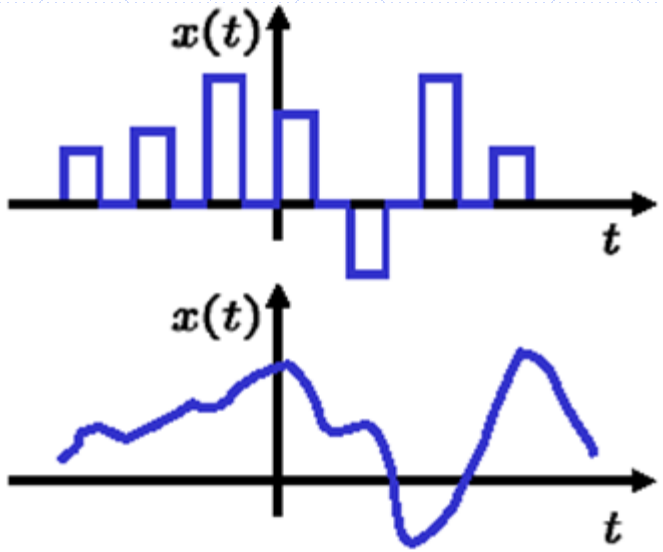


- Fundamentals
- Frequency Selective Circuits(Series Resonance, Parallel Resonance, Coupling circuits); Non-linear Analysis; Ch2

Preliminary

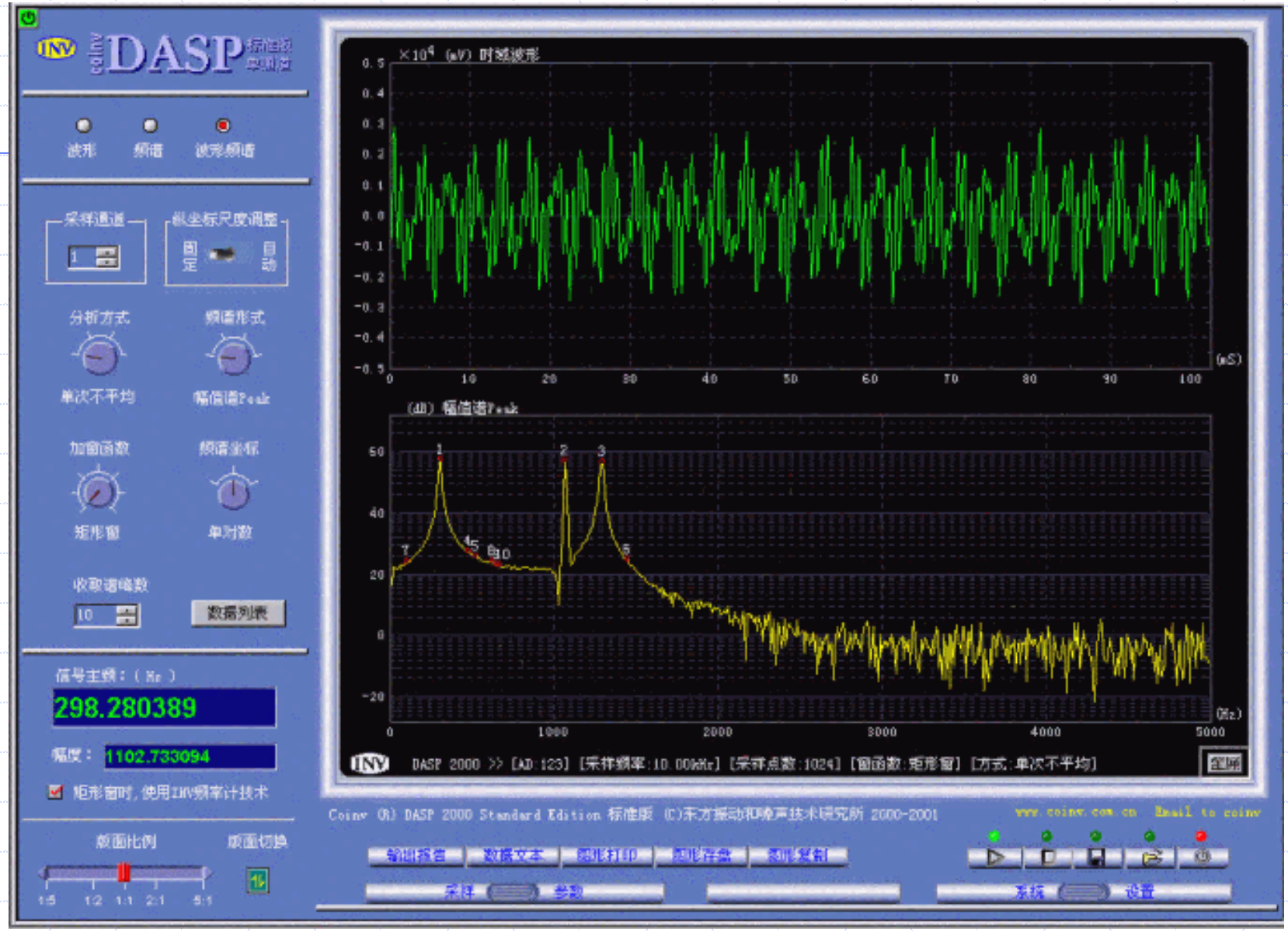
- 《Anolog Electronic Circuits》

Methodology



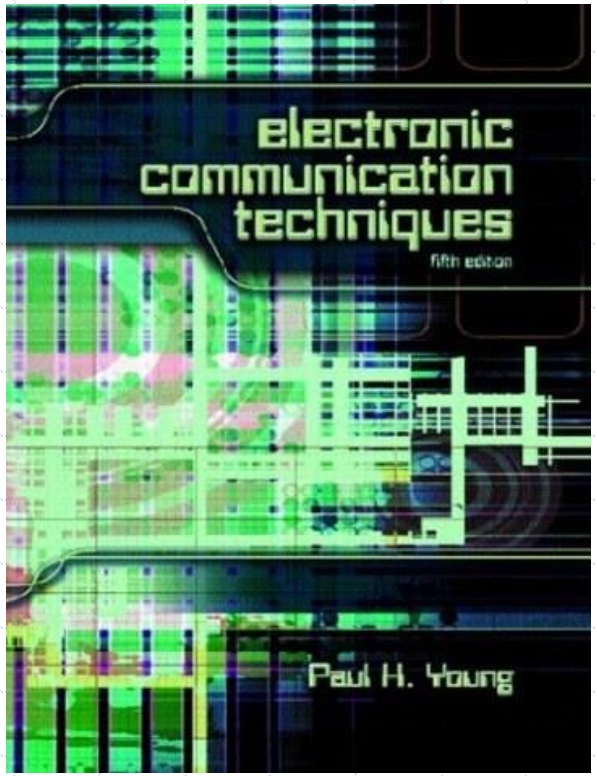
- Clear Concept (Knowledge Map)
  - Math formula *vs.* Physical significance
- Time Domain; Frequency Domain
  - Amplitude-frequency characteristics
  - Phase-frequency characteristics
- New (Mindset)

Time Domain; Frequency Domain



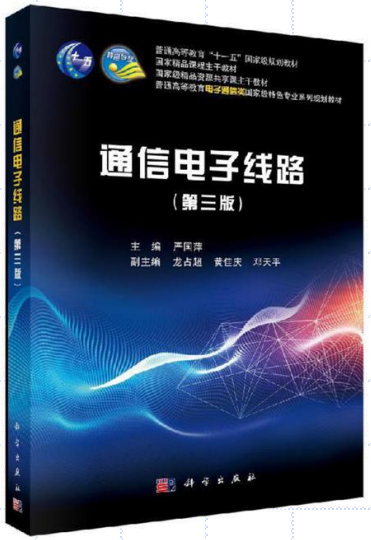
Reference Book

- Electronic Communication Techniques,
- Paul H. Young

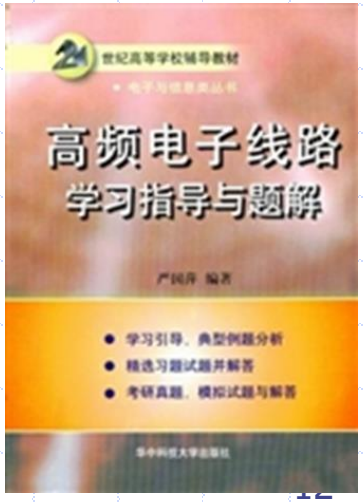


Reference Book

- 通信电子线路（第三版） 科学出版社
  严国萍、龙占超、黄佳庆、邓天平 2020



- 高频电子线路学习指导与题解
  华中科技大学出版社 严国萍编



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Grading

- Exam 60%
- Homework 15% （Homework+Quiz）
- Experiments 10%（Multisim）
- MOOC 15%

中国大学MOOC《通信电子线路》
华中科技大学 黄佳庆

Notice

- Course *vs.* Textbook/Reference
- 40 + 8
- Multisim simulation
- Knowledge MAP
  - MindManager

Q & A

- Any Questions ?
  Requirements ?
  Suggestions ?

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