

# Advanced Financial Modeling in Excel

## Module 3, Academic year 2017-2018

**Vladimir Koptsev**  
vladimir.koptsev@gmail.com

### Course description

---

The focus of this course is on best practice applied financial modeling for corporate finance and investment decisions. The course is fully case-based, topics include: building a complex operational model, valuation, M&A analysis & synergies, investment projects, startups and VC terms modeling.

### Course requirements, grading, and attendance policies

---

Financial accounting, basic excel skills, basic valuation techniques and corporate finance. The course grade is based on final exam (70%) and class attendance and performance (30%).

You'll need a laptop to perform modeling exercises for every lesson in the course.

### Course contents

---

Week	Topic
1	<b>Introduction</b> <ul style="list-style-type: none"><li>• Modeling for corporate finance deals and investment decisions</li><li>• Projecting future performance: key ideas</li><li>• Design, structure and logic of financial models</li><li>• Best practice in modeling: standards, formats, functions etc.</li><li>• Examples of real-life financial models for various purposes</li><li>• Sources of information</li><li>• Simple investment decisions modeling</li></ul>
2	<b>Building complex operating model (1/2)</b> <ul style="list-style-type: none"><li>• Key drivers for forecasting of financial results</li><li>• Excel set-up</li><li>• Building P&amp;L, BS, CFS and supporting schedules (WC, D&amp;A / Capex, Debt / Interest and other)</li></ul>
3	<b>Building complex operating model (2/2)</b> <ul style="list-style-type: none"><li>• Building additional schedules</li><li>• Scenarios</li><li>• Debugging mistakes</li><li>• Financial / investment analysis and dashboards</li></ul>

4	<b>Modeling for M&amp;A (1/2)</b> <ul style="list-style-type: none"><li>• Valuation (DCF, comps)</li><li>• Synergies analysis</li></ul>
5	<b>Modeling for M&amp;A (2/2)</b> <ul style="list-style-type: none"><li>• EPS accretion / dilution' analysis</li><li>• Sensitivities and overall results presentation</li></ul>
6	<b>Modeling for investment decisions</b> <ul style="list-style-type: none"><li>• MBO modeling</li><li>• IRR calculation / results presentation</li></ul>
7	<b>Modeling for startups and VC deals</b> <ul style="list-style-type: none"><li>• Startup modeling</li><li>• VC terms modeling / Fund economics modeling</li></ul>

### **Description of course methodology**

Lectures (10%), practical work in Excel based on case-studies (70%), deals and decision-making process simulation (20%).

### **Course materials**

---

#### **Required textbooks and materials**

1. Financial modeling & valuation, Paul Pignataro, Wiley
2. Investment banking, Rosenbaum

#### **Additional materials**

Additional sources and web-sites to be provided.

### **Academic integrity policy**

---

Cheating, plagiarism, and any other violations of academic ethics at NES are not tolerated.