



**AAB University**

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**Faculty of Computer Sciences**

*Subject:*

**Introduction to Digital Technologies & Circuits**

*Academic Year: 2014/2015*

*Semester: 1*

*ECTS: 6*

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## ■ Grading:

<b>Points:</b>	<b>Result:</b>
<b>90 – 100</b>	<b>10 ( ten )</b>
<b>80 - 89</b>	<b>9 ( nine )</b>
<b>70 - 79</b>	<b>8 ( eight )</b>
<b>60 - 69</b>	<b>7 ( seven )</b>
<b>50 - 59</b>	<b>6 ( six )</b>
<b>00 - 49</b>	<b>5 ( five )</b>



## ■ Background Reading – Basic Texts

- **Fundamentals of Logic Design**, 7th Edition, Charles H. Roth and Larry L. Kinney. CENGAGE Learning, 2014.
- **Qarqet Kompjuterike**, A. Dika, Fakulteti Elektroteknik, Universiteti i Prishtinës.
- **Qarqet Sekuenciale** (Dispencë), A. Dika, Fakulteti Elektroteknik, Universiteti i Prishtinës.
- **Invitation to Computer Science**, 5th Edition, G. Michael Schneider and Judith L. Gersting. CENGAGE Learning, 2010.
- **Digital Design, Principles and Practices**, John F. Wakerly. Prentice Hall, 2006



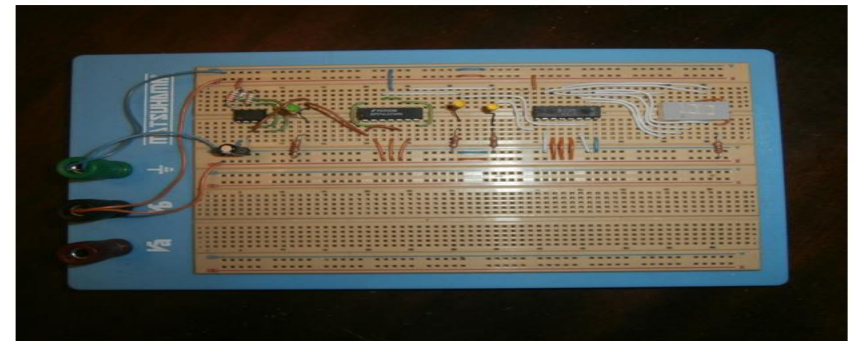
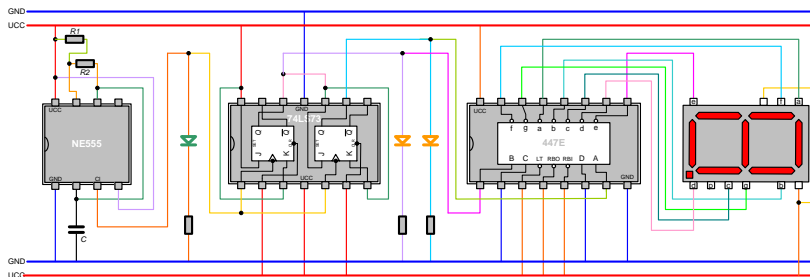
## ■ **Content:**

- Course Overview. Introduction to Computer Science
- Number Systems and Conversions
- Binary Logic and Codes
- Boolean Algebra and Logic Functions
- Digital Logic Circuits. Combinational Circuits
- Combinational Circuits. Encoders and Decoders
- Combinational Circuits. Multiplexers and Demultiplexers
- Arithmetic Circuits
  
- Midterm Exam (Week 9)



## ■ Content:

- Simulation of Combinational Logic Circuits
- Digital Logic Circuits. Sequential Logic Circuits
- Synchronous and Asynchronous Sequential Circuits
- Registers and Counters
- Practical Realization of Digital Logic Circuits
- Final Exam (Week 15)





- Questions?!

