

Introduction to Engineering A digital Resources

Unit 1 Introduction to Engineering

Lesson 1: <https://www.youtube.com/watch?v=btGYcizV0il>

Lesson 2: <https://www.youtube.com/watch?v=SXluMLZqi0Y>
<https://www.youtube.com/watch?v=XiRRrTgZdMg>

Lesson 3: <https://www.youtube.com/watch?v=QeyFjz2hSGE>
<https://www.youtube.com/watch?v=fT7LTaGzcok>

Lesson 4: <https://www.youtube.com/watch?v=HBmwoiDO59Q>
https://www.youtube.com/watch?v=QbtY_Wl-hYI

Unit 2 Engineering and Society

Lesson 5: <https://www.youtube.com/watch?v=jPZ8cEqpOOA>

Lesson 6: <https://www.youtube.com/watch?v=7CnM748hAXc>

Lesson 7: <https://www.youtube.com/watch?v=RwfSf8rBX-I>

Unit 3 Math and Science in Engineering

Lesson 8: <https://www.youtube.com/watch?v=KIBZUk39ncl>
<https://www.youtube.com/watch?v=PDsMUlexaMY>

Lesson 9: <https://www.youtube.com/watch?v=Z3ZO6oRbptM>
<https://www.youtube.com/watch?v=n4UiPAUDfaY>
<https://www.youtube.com/watch?v=tp7jLnmoNz4>

Lesson 10: https://www.youtube.com/watch?v=E_a3mQEOLK8
<https://www.youtube.com/watch?v=MhanyR5Rfk0>

Lesson 11: <https://www.youtube.com/watch?v=CuPmambJU5Q>
<https://www.youtube.com/watch?v=od7fWoKjV6E>

Lesson 12: Material is found in the lesson.

Unit 4 Engineering Design Process

Lesson 13: https://www.youtube.com/watch?v=MAhpfFt_mWM

Lesson 14: <https://www.youtube.com/watch?v=LnQS4zTQ5hU>
<https://www.youtube.com/watch?v=SdQw5uwU9R0>

Lesson 15: <https://www.youtube.com/watch?v=Hi55c1GnCN8>
<https://www.youtube.com/watch?v=pOvOdFeCdYk>

Lesson 16: Material is found in the lesson.

Lesson 17: Material is found in the lesson.

Unit 5 Engineering Systems

Lesson 18: <https://www.youtube.com/watch?v=W2NTYg6fZY0>
<https://www.youtube.com/watch?v=my63D9zG7bc>

Lesson 19: Material is found in the lesson.

Lesson 20: <https://www.youtube.com/watch?v=lgub7RFNTWM>
<https://www.youtube.com/watch?v=1aahTnB49Tk>

Lesson 21: <https://www.youtube.com/watch?v=XZlekCgE9K4>

Lesson 22: Material is found in the lesson.

Lesson 23: https://www.youtube.com/watch?v=0j2Mh_IHias
<https://www.youtube.com/watch?v=FTZPASwt5F0>

Lesson 24: <https://www.youtube.com/watch?v=C4UltqYDs9c>

Lesson 25: <https://www.youtube.com/watch?v=hy07pqmDmNk>

Lesson 26: <https://www.youtube.com/watch?v=wVPOp-tptPQ>
<https://www.youtube.com/watch?v=FurC2unHeXI>

Lesson 27: <https://www.youtube.com/watch?v=9Xh8Mz2X7RE>

<https://www.youtube.com/watch?v=o81vdCreJtQ>

Lesson 28: Material is found in the lesson.

Unit 6 Ergonomics, Ethics, and Liability

Lesson 29: https://www.youtube.com/watch?v=eKub-HrpD_Q

<https://www.youtube.com/watch?v=n7FnntGLaVo>

Lesson 30: <https://www.youtube.com/watch?v=8Jnf1kwaDoc>

<https://www.youtube.com/watch?v=m4f81ZS19v8>

<https://www.youtube.com/watch?v=uBUY6UTJ530>

Lesson 31: <https://www.youtube.com/watch?v=LAKImdMHpdE>

<https://www.youtube.com/watch?v=hy7f95Cnhnc>

Lesson 32: https://www.youtube.com/watch?v=o7TZi_jr1sU

https://www.youtube.com/watch?v=K_Uh09RAjR8

Lesson 33: <https://www.youtube.com/watch?v=BnU3sidMlls>

<https://www.youtube.com/watch?v=ofiepLizHCk>

<https://www.youtube.com/watch?v=x6rGER6gWcw>

Lesson 34: <https://www.youtube.com/watch?v=EkyUDcYBYpA>

<https://www.youtube.com/watch?v=VnvGwFegbC8>

Lesson 35: Material is found in the lesson.

Lesson 36: Material is found in the lesson.

Lesson 37: Material is found in the lesson.

Unit 7 Engineering Trade-Offs

Lesson 38: https://www.youtube.com/watch?v=zSHtExO_DcY

https://www.youtube.com/watch?v=m-G_7kcwr8I

<https://www.youtube.com/watch?v=sMjHkWzCf1I>

Lesson 39: Material is found in the lesson.

Lesson 40: <https://www.youtube.com/watch?v=YQ2Wi3Jh3X0>

<https://www.youtube.com/watch?v=8DX4T64-fpk>

Unit 8 Sustainable Design

Lesson 41: <https://www.youtube.com/watch?v=fzyzg9pPb-Y>

<https://www.youtube.com/watch?v=fM7AU78iPLA>

<https://www.youtube.com/watch?v=bsQBSVJoV04>

Lesson 42: <https://www.youtube.com/watch?v=K5lGqQmc-90>

<https://www.youtube.com/watch?v=wmoy27EZ8y0>

<https://www.youtube.com/watch?v=aKqNbTo2PFM>

Lesson 43: <https://www.youtube.com/watch?v=r1CpzEGhs3c>

<https://www.youtube.com/watch?v=V2GvQXvjhLA>

<https://www.youtube.com/watch?v=sf4oW8OtaPY>

Lesson 44: Material is found in the lesson.

Unit 9 Reverse Engineering

Lesson 45: <https://www.youtube.com/watch?v=CjMAMzke7nw>

<https://www.youtube.com/watch?v=oxo1FBScEAs>

<https://www.youtube.com/watch?v=D6mVlos-S2M>

Lesson 46: https://www.youtube.com/watch?v=AZ_xgLJvb48

<https://www.youtube.com/watch?v=El8YgBUasU>

Unit 10 Concurrent Engineering

Lesson 47: <https://www.youtube.com/watch?v=8eh13MweH3o>

<https://www.youtube.com/watch?v=SUY3bQ6FKdI>

<https://www.youtube.com/watch?v=qzqzNBeYj1Q>

Lesson 48: <https://www.youtube.com/watch?v=fB0wsdmV3Sw>

<https://www.youtube.com/watch?v=Jk-JwtScIIw>

https://www.youtube.com/watch?v=ztmaTF_Qs9A

Lesson 49: Material is found in the lesson.

Lesson 50: Material is found in the lesson.

Unit 11 Protecting Ideas

Lesson 51: https://www.youtube.com/watch?v=m_xEFnNWQJo

Lesson 52: <https://www.youtube.com/watch?v=4bmOBxgYK0k>

<https://www.youtube.com/watch?v=Ay9fZMUPCnE>

Lesson 53: https://www.youtube.com/watch?v=On_AIUvHHyM

<https://www.youtube.com/watch?v=IB6yY7Q3arg>

Unit 12 Technological Forecasting

Lesson 54: <https://www.youtube.com/watch?v=VQsZJHiamhw>

<https://www.youtube.com/watch?v=LxWnXK9M69E>

<https://www.youtube.com/watch?v=3d-EnYsJPDo>

Lesson 55: <https://www.youtube.com/watch?v=VBc59PoSnQQ>

<https://www.youtube.com/watch?v=kVn9sEBL3hg>

Lesson 56: Material is found in the lesson.

Unit 13 Skills for Design

Lesson 57: <https://www.youtube.com/watch?v=Usjrbt6XKy0>

<https://www.youtube.com/watch?v=KpWrHVo972g>

<https://www.youtube.com/watch?v=6dR3iKaWUoU>

Lesson 58: <https://www.youtube.com/watch?v=iwddgAoGBqg>

<https://www.youtube.com/watch?v=wOrmr5kT-48>

<https://www.youtube.com/watch?v=2m-xgti19-U>

Lesson 59: <https://www.youtube.com/watch?v=eOckdCUOrQA>

<https://www.youtube.com/watch?v=UMH8gHI4kS4>

<https://www.youtube.com/watch?v=AgBWfRaa6tw>

Unit 14 Research in Engineering

Lesson 60: <https://www.youtube.com/watch?v=SzBo4OowyQM>

Lesson 61: <https://www.youtube.com/watch?v=ObpYM0PtWAw>

<https://www.youtube.com/watch?v=MCLuUaXkeqI>

<https://www.youtube.com/watch?v=dwZixHYthuQ>

Lesson 62: Material is found in the lesson.

Lesson 63: Material is found in the lesson.

Unit 15 Creative and Critical Thinking

Lesson 64: <https://www.youtube.com/watch?v=ypkqlSKdADo>

<https://www.youtube.com/watch?v=dbN-66lwtgk>

<https://www.youtube.com/watch?v=Y6R9ps2E1oM>

Lesson 65: Material is found in the lesson.

Lesson 66: https://www.youtube.com/watch?v=dyegs_msGOM

<https://www.youtube.com/watch?v=IUrkjoPGxu8>

<https://www.youtube.com/watch?v=LEFIBKUapOE>

Lesson 67: https://www.youtube.com/watch?v=MAhpfFt_mWM

<https://www.youtube.com/watch?v=8FlvhRCXCol>

Lesson 68: <https://www.youtube.com/watch?v=l5M1erq0jgM>

<https://www.youtube.com/watch?v=gwWN1AZGpMI>

Lesson 69: <https://www.youtube.com/watch?v=wly65y5Dj2g>

https://www.youtube.com/watch?v=ar31DrNV_pM

Lesson 70: Material is found in the lesson.

Lesson 71: Material is found in the lesson.

Unit 16 Modeling and Prototyping

Lesson 72: <https://www.youtube.com/watch?v=j8n7vE7DZto>

<https://www.youtube.com/watch?v=JdMh9AeS1as>

Lesson 73: <https://www.youtube.com/watch?v=tcdKe1gmfpC>

<https://www.youtube.com/watch?v=CuPmambJU5Q>

Lesson 74: <https://www.youtube.com/watch?v=1bOaNSy5XY>

Lesson 75: <https://www.youtube.com/watch?v=2PzT0aAi9Lw>

https://www.youtube.com/watch?v=xglG_jGEvNQ

Unit 17 Testing Processes

Lesson 76: <https://www.youtube.com/watch?v=FmWlQ1X6gzo>

<https://www.youtube.com/watch?v=AxxkgxRsdqY>

Lesson 77: Material is found in the lesson.

Lesson 78: Material is found in the lesson.

Unit 18 Analyzing Your Design

Lesson 79: Material is found in the lesson.

Lesson 80: <https://www.youtube.com/watch?v=Hy48AFKEepo>

<https://www.youtube.com/watch?v=gbE4oxVLzVQ>

Lesson 81: <https://www.youtube.com/watch?v=fo0L6NZGZX8>

<https://www.youtube.com/watch?v=nnqtlzbiygA&list=PLUMy2myX224xF3xms5fRohmU51FiNNuwJ>

Unit 19

Lesson 82: Material is found in the lesson.

Lesson 83: Material is found in the lesson.

Lesson 84: Material is found in the lesson.

Lesson 85: Material is found in the lesson.

Unit 20 Design Presentation

Lesson 86: Material is found in the lesson.

Lesson 87: <https://www.youtube.com/watch?v=LzvhBAQeWOE>

<https://www.youtube.com/watch?v=Sml3ilumCHs>

https://www.youtube.com/watch?v=9U_mqypKORw

Lesson 88: <https://www.youtube.com/watch?v=TQUCp9UQuwk>

<https://www.youtube.com/watch?v=ciCFqHOkDIs>

<https://www.youtube.com/watch?v=zAOyjqWhL0k>

Lesson 89: Material is found in the lesson.

Lesson 90: Material is found in the lesson.