

# ME Course Scheduling- Modeling Approach

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INTEGER PROGRAMMING IN  
AMPL



LACK OF DATA NECESSITATED  
MANY ASSUMPTIONS

# Visualization & Findings

	M	T	W	Th	F
8:00	Makris 3350a Caruth 184 Mularkey 4152a Junkins 112	Heydari 2320a Caruth 183 Story 4350a Caruth 383 Heydari 2320a Caruth 183	Makris 3350a Caruth 184 Mularkey 4152a Junkins 112	Heydari 2320a Caruth 183 Story 4350a Caruth 383 Heydari 2320a Caruth 183	Makris 3350a Caruth 184 Mularkey 4152a Junkins 112
8:30					
9:00	Borzova 2320b Caruth 384 Kim 3341a Junkins 101 Lerner 4380a Junkins 112		Borzova 2320b Caruth 384 Kim 3341a Junkins 101 Lerner 4380a Junkins 112		Borzova 2320b Caruth 384 Kim 3341a Junkins 101 Lerner 4380a Junkins 112
9:30		Williams 2342a Junkins 112 Tong 3340a Junkins 203 Mularkey 4152b Caruth 183		Williams 2342a Junkins 112 Tong 3340a Junkins 203 Mularkey 4152b Caruth 183	
10:00	Borzova 1302b Junknis 110 Lovas 4338a Junkins 202 Williams 2331b Caruth 161		Borzova 1302b Junkins 110 Lovas 4338a Junkins 202 Williams 2331b Caruth 161		Borzova 1302b Junkins 110 Lovas 4338a Junkins 202 Williams 2331b Caruth 161
10:30					
11:00	Borzova 4322a Caruth 384 Mularkey 4152c Junkins 112 101		Borzova 4322a Caruth 384 Mularkey 4152c Junkins 112 101		Borzova 4322a Caruth 384 Mularkey 4152c Junkins 112 101
11:30					
12:00	Tilley KNWa Caruth 161 Nie 2340a Junkins 113		Tilley KNWa Caruth 161 Nie 2340a Junkins 113		Tilley KNWa Caruth 161 Nie 2340a Junkins 113
12:30					
13:00	Aghagholizadeh 2310b Caruth 384 Hurmuzlu 4360a Junkins 202 TA_5 4340b Caruth 106 Willis 3332a Caruth 147	TA_5 2131e Junkins 102	Aghagholizadeh 2310b Caruth 384 TA_9 2140d Junkins 342 Hurmuzlu 4360a Junkins 202 TA_1 2131a Caruth 485 Willis 3332a Caruth 147	TA_10 2142a Caruth 314	Aghagholizadeh 2310b Caruth 384 Hurmuzlu 4360a Junkins 202 TA_16 3132c Caruth 484 TA_1 3370a Junkins 215 Willis 3332a Caruth 147
13:30					
14:00	TA_11 2142b Embery 123	Hurmuzlu 2310a Junkins 205 TA_15 3132b Caruth 485 Lovas 4370a Junkins 202 Willis KNWb Caurth 147	TA_7 2140b Caruth 484 TA_2 3370b Junkins 215	TA_9 2140d Caruth 485 Hurmuzlu 2310a Junkins 205 Lovas 4370a Junkins 202 Willis KNWb Caurth 147	TA_10 5338b Junkins 215
14:30					
15:00	TA_6 4340c Caruth 106	TA_7 4160a Embery 123 TA_8 2140c Caruth 308	TA_6 2140a Junkins 215	TA_8 2140c Junkins 215 TA_13 2142d Junkins 215	TA_2 2131b Caruth 106 TA_15 3132b Caruth 485
15:30		Borzova 1302a Junkins 113 Lerner 4340a Junkins 203 Lage 2331a Caruth 383 TA_4 2131d Junknis 217	TA_13 2142d Junkins 215	Borzova 1302a Junkins 113 Lerner 4340a Junkins 203 Lage 2331a Caruth 383	TA_13 2142d Junkins 215 TA_4 3370d Caruth 106
16:00	TA_11 5338c Junkins 215		TA_3 3370c Caruth 485	TA_3 2131c Junkins 102	
16:30					
17:00					
17:30					
18:00					
18:30	Lage 7333a Caruth 384 Radighieri 5374b Caruth 179 Richer 5326a Junkins 202	Tong 7319a Junknis 110 Gao 7340a Junkins 202 Raad 7337a Caruth 383 Radighieri 5374a Caruth 384	Heydari 5302a Junkins 112	Kong 5338a Caruth 147 Krueger 7336a Junkins 205	Gao 8340a Caruth 179 Richer 7346a Junkins 205

# Recommendations

- Course scheduling is an excellent candidate for optimization through integer programming
- Model should be further developed to include information from other engineering departments
- LP for scheduling is fast, inexpensive, easily-adaptable, and reliable