The Smart Grid Workforce of the Future

Job Impacts, Skill Needs, and Training Opportunities

Industry

6,000 existing employees and new hires of corporate partners 300 corporate trainers

Labor Union Outcomes
600 Labor Union journeymen
200 Labor Union apprentices
75 Labor Union trainers

4 year University Outcomes (IIT & partner schools)

40 college teachers & faculty 70 Undergrad students 100 Graduate students

Community College Outcomes

192 Community College teachers & faculty 2,300 Community College students

Chicago Public Schools Outcomes

1,430 CPS Teachers 37,600 CPS k-8 students

Veterans Outcomes (efforts duplicated through community colleges and IIT)

2,500 Veterans and Service members 600 Veterans and Service Members

49,000 PEOPLE IMPACTED BY THE SMART GRID CENTER CURRICULUM

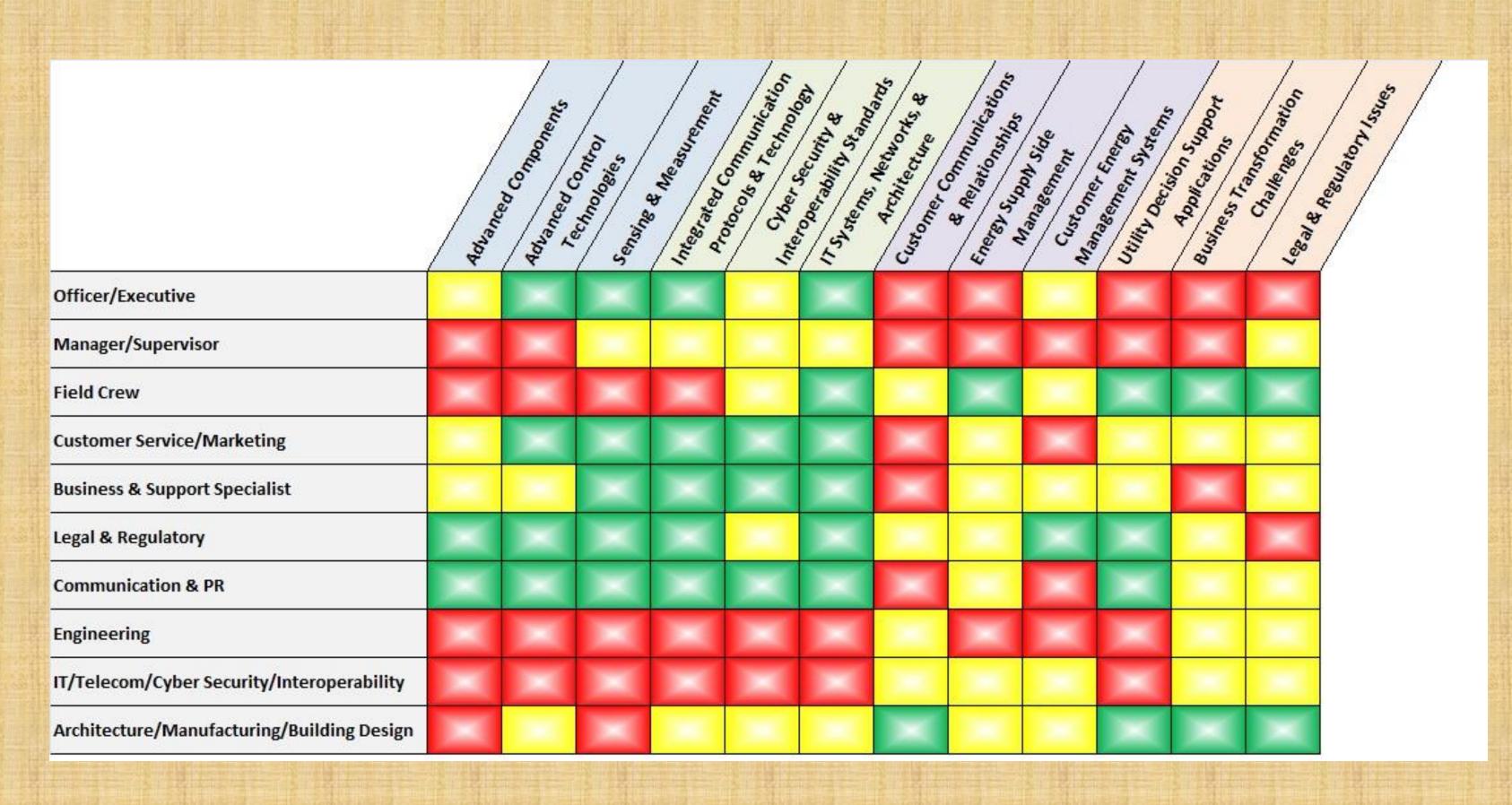
SOC	Functional Expert Classifications Job Classifications w/ Major Impact (12)
	Engineers
17-2070	Electrical and electronics engineers
17-2071	Electrical engineers
17-2072	Electronics engineers, except computer (includes telecommunications engineer)
	IT/Telecom/Cyber security/Interoperability
15-1061	Database administrators
15-1071	Network and computer systems administrators
15-1081	Network systems and data communications analysts
15-1099.02	IT Systems Architecture (Computer Systems Engineers/Architects)
15-1030	Computer software engineers
15-1031	Computer software engineers, applications
15-1032	Computer software engineers, systems software
	Architects/Manufacturing/Building Design
17-1011	Architects
17-3011.01	Architectural drafters (include GIS mappers)

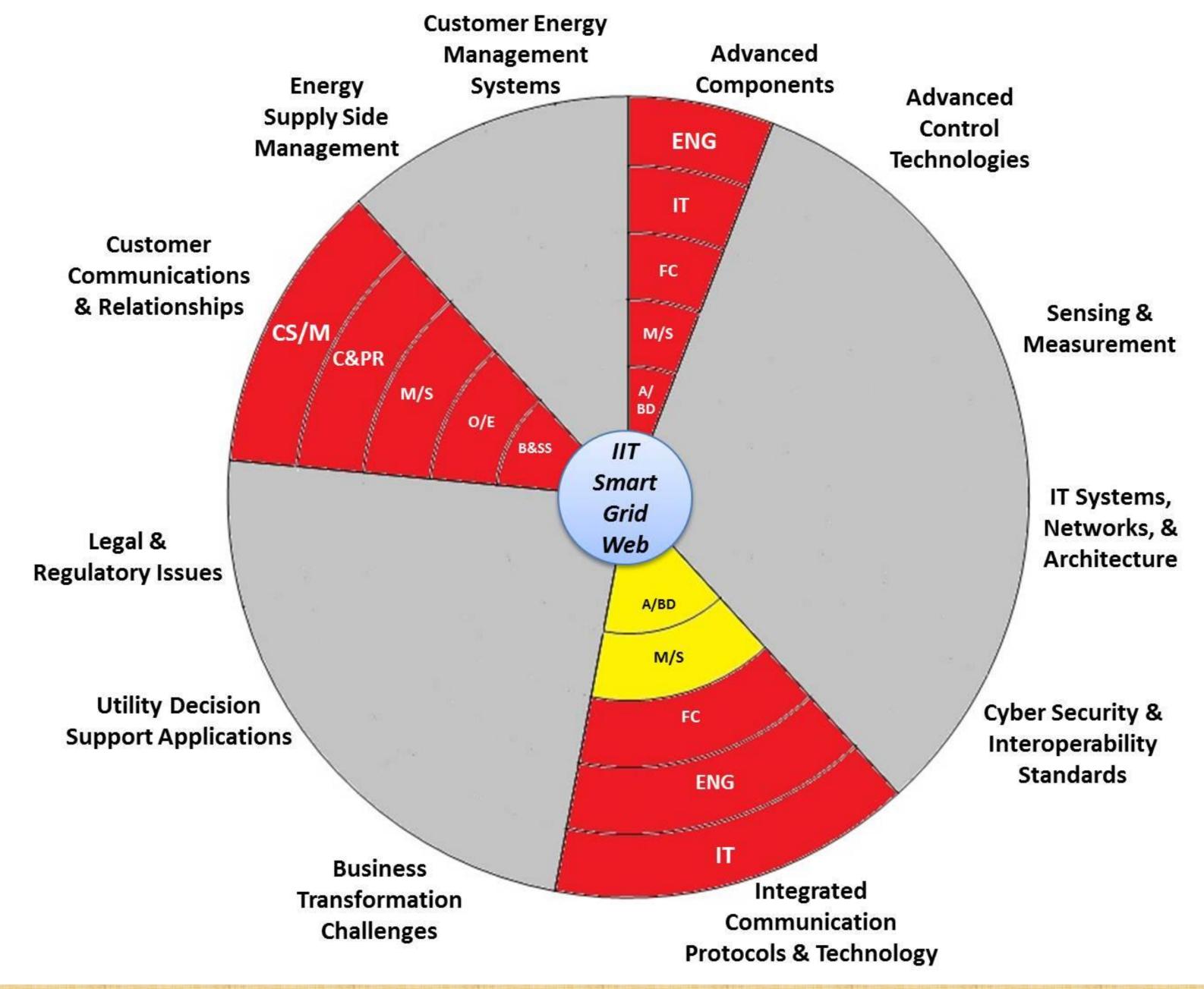
擅	SOC	Organizational/Department Job Classifications w/Major Impact (23)
		Managers/Supervisors
ħ	11-1021	General and operations managers (includes facility managers)
į.	11-2020	Marketing and sales managers
	11-3021	Computer and information systems managers
	11-9041	Engineering managers
	11-3031	Financial managers
		Field Employees
Į.	47-1011	First-line supervisors/managers of construction trades and extraction workers
	33-1000	First-line supervisors/managers, protective service workers
	43-5041	Meter readers, utilities
	47-2111	Electricians
	47-4011	Construction and building inspectors
	49-2094	Electrical and electronics repairers, commercial and industrial equipment
	49-2095	Electrical and electronics repairers, powerhouse, substation, and relay
	49-9051	Electrical power-line installers and repairers
	49-9052	Telecommunications line installers and repairers
i di	49-9099	Installation, maintenance, and repair workers, all other
	51-8012	Power distributors and dispatchers (include system dispatchers)
		Customer Service/Marketing
Į.	41-4011	Sales representatives, wholesale and manufacturing, technical and scientific products
	43-4051	Customer Sales Representatives
ğ		Business & Support Specialists
i i	13-1111	Management analysts
	15-2031	Operations research analysts
ħ		Legal & Regulatory
	11-9199.01	Regulatory Affairs managers
	13-1041.07	Regulatory Affairs specialists
		Communication & PR
	27-3031	Public relations specialists





ILLINOIS INSTITUTE OF TECHNOLOGY





Short-term risk for long-term reward

More proficient employee skills

Immaturity of "Smart Grid" concept

Evolution of the SG will take time, thus allowing the education and industry to "catch up"

Resistance to change