

# AMIE L. ELLIS

## EDUCATION

- M.S.** Kettering University (Formerly GMI Engineering & Management Institute), Flint, MI, U.S.A.  
Graduated Spring 1998.  
Major: MS in Manufacturing Management
- B.S.** State University of New York at Buffalo, Buffalo, NY, U.S.A.  
Graduated Spring 1992.  
Major: BS in Industrial Engineering

## PROFESSIONAL EMPLOYMENT HISTORY

- Georgia Southern University (Statesboro, GA)  
Instructor, Department of Logistics and Supply Chain Management (2016-present)
- University of Kentucky (Lexington, KY)  
Director of Assessment and Academic Data Analysis  
Gatton College of Business and Economics (2011-2016)
- Bluegrass Community and Technical College (Lexington, KY)  
Adjunct Instructor, Developmental Mathematics (2010-2011)
- American Public University System (Charles Town, WV)  
Adjunct Instructor, Department of Transportation and Logistics Management (2010-2011)
- Clemson University (Clemson, SC)  
Lecturer, Department of Management (2008 – 2010)
- Schneider Electric – Square D Company (Seneca, SC)  
Senior Manufacturing Engineer (*Engineering Manager*), MCC Assembly (8/2007-6/2008)
- Delphi Corporation, Thermal & Interior Division (Lockport, NY)  
Employee Selection and Training, Divisional (6/1996-6/2007)  
Senior Manufacturing Engineer (*Operations Manager*), Injection Molding (1/2004-6/2007)  
Senior Industrial Engineer (*Engineering Manager*), Injection Molding (2001-2004)  
Lean Advisor (*Lead Facilitator*), Global Competitive Team (1998-2000)  
Divisional Ergonomics Coordinator, Global Health and Safety (1997-1998)  
Divisional Manufacturing Metrics Coordinator, Divisional Operations Management (1996-1997)  
Advanced Industrial Engineer, Global Manufacturing (1996-1997)
- GM Hughes Electronics, Delco Electronics Division (Kokomo, IN)  
Industrial Engineer, Sensors and Power Modules (1992-1995)  
Ergonomics Chair, Kokomo Site (1994-1995)
- General Motors Corporation, Harrison Division (Lockport, NY)  
Cooperative Education Student (1990 – 1992)

## TEACHING EXPERIENCE

- MGT3430 Operations Management***  
*College of Business Administration, Georgia Southern University, 5 sections, 2016-2017*

This is a required course for undergraduate business students and covers major topics in operations management including operations strategy, design, planning, and control. This course serves to develop both conceptual and analytical skills that allow students to solve practical managerial problems encountered within manufacturing and service firms. Course consists of live lectures, class activities, and exercises.

***MGT3437 Service Operations***

*College of Business Administration, Georgia Southern University, 2 sections, 2016-2017*

This course is offered as an elective for select undergraduate business majors. Major topics discussed include designing the service enterprise, managing service operations, and understanding service supply relationships. This course serves to develop both conceptual and analytical skills that allow students to solve practical managerial problems encountered specifically within service firms. Course consists of live lectures, class activities, and exercises.

***MGT4435 Six Sigma***

*College of Business Administration, Georgia Southern University, 1 section, 2017*

This elective course is offered to select undergraduate business majors. Through the use of the Six Sigma DMAIC model students gain an understanding of process excellence and continuous improvement. The content of this course aligns with the coverage of the ASQ Six Sigma Green Belt Certification exam. Students successfully completing the cumulative final exam earn Georgia Southern University Green Belt certification. Course consists of live lectures, class activities, and exercises.

***MGT310 Intermediate Business Statistics***

*College of Business and Behavioral Sciences, Clemson University, 8 sections, 2008-2010*

This is a required course for undergraduate management students and builds on the foundation developed in the introductory statistics course. The objective of this course is to provide students with the statistical tools necessary to perform a variety of analyses in the work-place and to become a valuable and productive member of an organization. Students are introduced to the mechanics necessary to perform statistical investigation using advanced methods (for applications) such as analysis of variance, correlation and regression analysis and nonparametrics. Clear-cut examples are provided to the student to better bridge the gap between theory and on-the-job application. Course is administered through live lectures as well as online materials and exercises. Students are assessed through quizzes, group problem analyses, examinations and their ability to create and analyze their own statistics problems.

***MGT390 Operations Management***

*College of Business and Behavioral Sciences, Clemson University, 4 sections, 2008-2010*

This is a required course for undergraduate management students and covers major topics in operations management including operations strategy, design, planning, and control. This course serves to develop both conceptual and analytical skills that allow students to solve practical managerial problems encountered within manufacturing and service firms. Course consists of live lectures, class activities, and online materials and exercises.

**TEACHING EXPERIENCE**

***MGT404 Advanced Statistical Quality Control***

*College of Business and Behavioral Sciences, Clemson University, 2 sections, 2008-2009*

This course is an elective for undergraduate management students and is designed to introduce fundamental quality management concepts to undergraduate students. The focus of this class emphasizes the economic aspects of quality decisions, foundations of quality management including Deming's Theory of Management and the application of statistical quality control techniques including process control, process capability, and acceptance sampling. Students are assessed through quizzes, examinations and a semester project.

***MGT408 Lean Operations***

*College of Business and Behavioral Sciences, Clemson University, 1 section, 2009*

This course is an elective for undergraduate management students and focuses on the use of scientific methods for the design of operating systems for both manufacturing and services. Special emphasis is on the development of the Toyota Production System for continuous improvement and the application of the relevant techniques to the design of facilities, jobs, and systems. Topics include value stream mapping, workplace organization, operational availability, employee environment and involvement, material movement, flow manufacturing, quality, and the fundamentals of lean implementation. Students are assessed through examinations, case study analyses and a semester project involving lean projects on campus.

***TLMT313 Supply Chain Management***

*American Public Univ. System, 10 online sections, 2010-2011*

Created the course template, including online lecture topics, assigned readings, discussion board threads, quizzes, tests, and final project, for all online instructors. This course is a study of supply chain management from the consumer back to raw materials. The entire process is studied from the standpoint of leading theories and best practices of cutting edge organizations.

***MAT55 Pre-Algebra***

*Bluegrass Community and Technical College, 1 section, 2011*

This course includes operations on integers, decimals and fractions. Exponents, square roots, percentages, ratios, proportions, prime factorization, basic geometry, algebraic expressions, basic linear equations, and applications are also introduced. Students are assessed through in-class examinations, quizzes, and online homework.

***MA108 Intermediate Algebra***

*Bluegrass Community and Technical College, 5 sections, 2010-2011*

This course covers material commonly found in second year high school algebra. Topics include numbers, fractions, algebraic expression, simplifying, factoring, laws of exponents, linear equations, simple graphs and polynomial algebra. Students are assessed through in-class examinations, quizzes, and online homework.

**STRATEGIC, OPERATIONS AND BUDGET MANAGEMENT**

***Develop Forecast, Optimize Resources, and Track Progress toward College's Strategic Planning Goals***  
*Gatton College, University of Kentucky, 2012-2016*

- Mine data, as College's designated "HANA/Tableau" Super User from University systems to accurately forecast course enrollment, and course and program fee income for the College, and develop resource plans to support the forecast.
- Collaborate with the University's Advanced Analytics team and the Provost Budget Office to identify and reconcile errors and integrate new data that enables important insights for Colleges and their adherence to the Provost's strategic plan.
- Create online dashboards for the College and University that display real-time, consistent information so that progress toward the strategic plan can be visualized.

**STRATEGIC, OPERATIONS AND BUDGET MANAGEMENT**

***Develop Institutional Effectiveness (IE) Organization Models for University Provost***  
*University of Kentucky, 2015-2016*

- Develop organizational models for IE that assures University-level assessments, accreditation, and program review processes are carried out in the most effective and efficient manner.
- Advance recommendations that enhance the relationship of other campus entities with IE (e.g., Institutional Research, Strategic Planning, Institutional Reporting & Surveying, State Authorization, QEP, Community Engagement) to improve process workflows.
- Evaluate new strategies that better utilize University-level IE systems and subsystems to enhance student academic success, research productivity and impact, community engagement and outreach, and other operational outcomes.

***Collaborate with Leadership Teams to Develop and Execute College Strategy***  
*Gatton College, University of Kentucky, 2013-2016*

- Collaborate with faculty and staff to develop a strategic plan draft (as member of the College Strategic Planning Task Force)
- Plan, prioritize, and coordinate the implementation of strategic initiatives, and other tactical actions College performance (as ex-officio member of the Strategic Planning Committee and member of the Dean's Leadership Council).

**ACCREDITATION AND ASSESSMENT EXPERIENCE**

***Manage College's Adherence to Accreditation Standards***  
*Gatton College, University of Kentucky, 2011-2016*

- Prepared the College's AACSB Fifth Year Maintenance of Accreditation Report, which required detailed analyses of the College's strategic plan, financial plan, faculty qualifications, and assurance of learning, and the identification and use of metrics to assess attainment of strategic plan goals.
- Drafted the College's AACSB's Continuous Improvement Review Application in preparation for the College's upcoming AACSB Continuous Improvement Review.
- Developed the College's Self-Study for SACS compliance.

***Manage the College's Assessment of Student Learning Outcomes***  
*Gatton College, University of Kentucky, 2011-2016*

- Create, maintain, and revise assessment plans for all accredited College degree and certificate programs; involves identifying learning goals and developing curriculum maps
- Develop, manage, and refine data collection processes for all accredited College degree and certificate programs.
- Aggregate and analyze data to assess student learning outcomes by accredited degree program.
- Collaborate with College faculty to identify shortcomings, use SAP HANA data to identify root causes of underperformance, and develop improvement plans that improve student learning outcome performance.
- As appointed member of the University Assessment Council: (i) review and provide feedback on program/unit assessment plans, results, and learning improvement initiatives, (ii) advise Provost on priority and feasibility of College learning improvement action plans, (iii) provide feedback, suggestions, and recommendations concerning ongoing assessment initiatives to Provost, and (iv) communicate key aspects of University's student learning assessment program to College administrators, faculty, and staff.

## **ACCREDITATION AND ASSESSMENT EXPERIENCE**

### ***Lead College Data Analysis For Accreditation, Strategic Decision-making, and External Use Gatton College, University of Kentucky, 2011-2016***

- Aggregate and analyze student, faculty, and academic program data obtained from SAP HANA using Tableau Desktop to support AACSB accreditation, SACS reaffirmation, College and University strategic planning and tactical decision-making, and completion of external surveys that affect College rankings.

### ***Lead College's External Ranking And Survey Activities***

*Gatton College, University of Kentucky, 2011-2016*

- Respond to national surveys regarding the College's academic programs for national rankings and publications
- Oversee execution of all external survey components, including communications with students, alumni and recruiters.

### ***Supported Department's AACSB Accreditation for Select Courses***

*College of Business and Behavioral Sciences, Clemson University, 2008-2010*

- Determined relevant learning objectives and corresponding assessment methods and metrics to comply with AACSB requirements for Business Statistics and Operations Management courses; participated in meetings with visiting AACSB team.

## **PEDAGOGICAL TRAINING SEMINARS COMPLETED**

- Developing an Online Distance Learning Course (Spring 2010)
- Fast but Fair Methods to Grade Writing and More (Spring 2010)
- Student Evaluations: What Factors Affect Them and How Can You Improve Them (Spring 2009)
- Writing Objective Test Items That Assess Thinking Skills (Spring 2009)

## **ACADEMIC TOOLS**

Echo360, Blackboard Learn, MyStatLab, MyOMLab, ActivStats, SMART Board, Streaming Video, Wikis, iTunesU, Blogs, SPSS, Data Analysis Plus, DDXL, iClicker, Educator, Sakai, Digital Measures, Academic Analytics, Qualtrics, folio

## **BUSINESS TOOLS**

Tableau Desktop, Tableau Server, Tableau Dashboards, Access, Excel, PowerPoint, SPSS, Minitab, SAS, Data Analysis Plus, AutoCAD, WITNESS, MOST, MATTEC, ERGOPRIME, Word, Publisher, FrontPage, SAP, SAP HANA

## **UNIVERSITY AND COLLEGE COMMITTEES**

Provost Task Force on Institutional Effectiveness  
Strategic Planning Task Force  
University Assessment Council  
Strategic Planning Committee  
Dean's Leadership Council

## **CERTIFICATIONS**

SCOR Scholar Certification – February 2011  
Theory of Constraints Certification – Niagara University

## **PROFESSIONAL EXPERIENCE**

### ***Professional Skills***

Operations Management, Process Improvement, Strategic Planning, Metric Identification and Development, Project Management, Team Leadership & Supervision, Engineering Mentoring, Process Development, Inter-organizational Product Development, Lean Manufacturing System Design & Implementation, Quality Control

### ***Business Processes***

Manufacturing Business Plan (Budget) Development, Activity Based Costing, Operations Plan Development and Management, Manufacturing Metrics, Automotive Quality Standard TS 16949, Facilitation of Various Types of Joint Workshops including Lean Transformation, Throughput Improvement and Process Improvement, PPAP, CMII, PFMEA, DFMEA, Process Control Plans, UAW Labor Issue Resolution, Implementation of GM/UAW/OSHA Ergonomics Agreement, Bill of Process

### ***Process Experience***

Motor Control Center Assembly, HVAC Assembly, Injection Molding, Oil Cooler Assembly, Radiator/Condenser Core Stack, Heater Core Assembly, Pre-Production Build, Vacuum Braze Radiator Assembly, Condenser Assembly, Pressure Sensor Assembly, Voltage Regulator Assembly

### ***Lean Practices***

Quality Gates, Pull System Design and Implementation, Level Scheduling, Lot Size Reduction, Standardized Work Implementation, Error Proofing, Problem Solving, Workstation Design, Part Delivery, Elimination of Waste, Material Movement, Constraint Management, Manufacturing Cell Design, Part Presentation, 5S, Value Stream Mapping

## **INDUSTRIAL PROJECT EXPERIENCE**

### **Divisional Manufacturing Metrics Coordinator – Delphi Corporation (1996-1997)**

*Collaborated on the development of the annual Divisional Operations Strategy.* Development involved the inclusion of new operations performance metrics, the addition of new manufacturing sites and establishment of annual operations performance objectives. Primary objectives included the attainment of significant annual improvement in productivity, capacity utilization, uptime and scrap reduction in support of the annual Business Plan. Aggregated data from Delphi Thermal's worldwide manufacturing facilities to provide a single Delphi Thermal quarterly report to Delphi Corporation Headquarters. Presented divisional manufacturing metrics to corporate executives highlighting key findings. Worked in collaboration with other Delphi Divisional Coordinators to derive new metric definitions and formulas and improve upon existing key metric formulas and definitions for use throughout Delphi Corporation.

### **Motor Control Center Assembly Lean Transformation – Schneider Electric (2008)**

*Led the first lean transformation project in Seneca, SC, facility for high volume, high variation motor control center assembly.* Responsibilities included design and implementation of lean principles through new workstation design, part presentation, material movement and standardized work. Achieved 33% productivity improvement, reduced ergonomic risks, reduced WIP by 30% and improved first pass yield by 20%.

### **Employee Selection and Training – Delphi Corporation (1996-2007)**

*Interviewed and mentored cooperative education students and entry level engineers.* Interview experiences included effective use of the STAR interview technique and harmonization of perspective employee ratings across the interview team. Mentorship responsibilities included project guidance, professional network development, and serving as a general resource for day to day activities, procedures and operations.

## **INDUSTRIAL PROJECT EXPERIENCE**

### **Divisional Ergonomics Coordinator – Delphi Corporation (1997-1998)**

*Implemented processes that ultimately led to a reduction in the number of ergonomic related OSHA recorded incidents and applied them globally. Process changes implemented include: conducting regular audits at U.S., Mexican and European manufacturing facilities, launching a Transitional Work Center with value-added jobs designed to prevent and/or shorten disability leaves, product and tool design ergonomic assessments, and sharing of best practices for like processes globally.*

### **Injection Molding Operation Plan Development – Delphi Corporation (2002-2004)**

*Created an operating plan for the injection molding manufacturing business. Data was collected to identify press capabilities for over 60 machines, tool requirements for over 100 molds, crane sizes associated with each bay, and standardized work and transportation labor associated with each plastic part produced. This data was compiled into a database that provided engineering and manufacturing a tool to determine the most effective assignment of tools, presses and labor based on specified volume requirements. Implementation of this tool decreased overtime, improved schedule attainment, reduced scrap, reduced inventory, decreased mold set-up time, and eliminated unnecessary tool changes.*

### **Brazil S-Truck Program – Delphi Corporation (2006)**

*Domestic project leader for movement of S-Truck related component production from Lockport, NY to Brazil. Worked directly with Delphi counterpart in Brazil to determine cost effective inventories to provide uninterrupted service to customers, identified tools and equipment to be transferred to Brazil, satisfied customs and Brazilian government requirements for all transferred tools and equipment, facilitated sourcing changes of component parts where needed, and facilitated the updating of all impacted service contracts.*

### **HVAC Assembly Pack Label Error-Proofing – Delphi Corporation (2006)**

*Led a team in the design and implementation of an HVAC assembly error-proofing system. System verified each unit contained the correct components, the pack was filled with the correct number of units, each unit had passed a functional test and was the correct model. Serialized bar-coded labels are printed in the manufacturing cell and affixed to each unit at the first workstation and critical information is stored for every unit throughout the process. New serialized label replaced customer label at a savings of \$0.06 per unit at 250,000 units/yr.*

### **Komax Zeta Wire Harness Machine Implementation – Schneider Electric (2007)**

*Led implementation of new \$400K wire harness machine. Deliverables for this project included 100% productivity improvement, 33% WIP reduction, 50% floor space reduction and 50% scrap reduction.*

### **Vacuum Braze Radiator Throughput Improvement Workshop - Delphi Corporation (1998)**

*Facilitated a Quality Network Transformation Project consisting of thirty members focused on improving the throughput of the Vacuum Braze Radiator Clinch area. Trained team on lean practices and established a process and an implementation plan that achieved a 12% improvement in throughput. Estimated annual savings: \$2,000,000*

### **Pre-Production Build Process Improvement Workshop – Delphi Corporation (1996)**

*Facilitated a joint team (hourly and salaried) in reducing the time to build pre-production products in the model shop. Deliverables for this included a flowchart identifying the pre-production build process and resulted in a significant reduction in time from concept to prototype.*

## **INDUSTRIAL PROJECT EXPERIENCE**

### **CAB Heater Constraint and Manufacturing Systems Transformation Project – Delphi Corporation (1998)**

*Led a Quality Network Transformation Project targeted on constraint management, operational availability, and FTTQ. Improved FTTQ by implementing Quality Gates; improved throughput by conducting an area-wide constraint analysis, elevating the identified constraint and implementing a new operation plan to effectively manage the constraint. Improved long-term operational availability through implementation of hourly count boards and the problem solving process. Estimated annual savings: \$240,000*

### **HVAC Assembly Cell – Delphi Corporation (2003)**

*Designed and implemented an assembly cell for an existing HVAC unit assembly line. Replaced traditional paced conveyor with flexible manufacturing cell. Designed and implemented ergonomically friendly part presentation for all components at all stations and obtained a 12% improvement in productivity.*

### **HTC Condenser Material Movement – Delphi Corporation (1999)**

*Reduced inventory through implementation of lean material movement strategies. Specifically, Header Tube Condenser components were packaged in right-sized containers, set up in a supermarket and delivered to the assembly workstations by kanban. Pallets and fork lift trucks were replaced by tuggers and Creform carts. Workstations were designed to accommodate only 1 hour's worth of parts resulting in improved part presentation, improved operator cycle time through standardized work implementation, and reduced floor space.*

### **Aluminum Oil Coolers Operational Study – Delphi Corporation (2000)**

*Conducted an operational study to collect data used in the development of the Aluminum Oil Cooler Production Routing tool. This tool was used to track the following real time manufacturing performance metrics: operational availability, operator utilization, machine utilization, and machine efficiency. This tool served as an operations cost estimator and provided managers insight into the effects proposed changes may have on the total production system.*

### **Ergonomics Co-Chair – GM Hughes Electronics (1994-1995)**

*Served as a consultant to the manufacturing areas providing guidance to improve existing high risk jobs cost effectively. Also served as a consultant to engineers on new equipment purchases. Developed an Ergonomics for Engineers training course and trained over 100 product and manufacturing engineers.*

### **Sensors & Power Modules – GM Hughes Electronics (1992-1995)**

*Responsible for studying and planning operations for four manufacturing areas for the effective utilization of personnel, material, machines, and facilities. Proposed and implemented cost justified improvements, maintained direct labor routings, and constructed and maintained ABC (Activity Based Costing) models. Designed and implemented an internal pull system.*

### **Cooperative Education Assignments – General Motors Corporation (1990-1992)**

*Manufacturing Supervision, Manufacturing Engineering, Industrial Engineering*