

CURRICULUM VITAE

(Chronological)

NAME: Robert W. Hewitt, Jr. DEPARTMENT: Engineering Technology RANK: Associate Professor

DEGREES

DEGREE	DISCIPLINE	INSTITUTION	YEAR
BSET	Manufacturing Engineering Technology	The University of Memphis	1996
MSET	Manufacturing Engineering Technology	The University of Memphis	2003

EXPERIENCE

RANK/POSITION	DEPARTMENT/DIVISION	INSTITUTION/COMPANY/ORGANIZATION	PERIOD
Engineering Technician	Engineering Department	Coleman Engineering, Inc.	1990-1995
Design Engineer	Engineering Department	Coleman Engineering, Inc.	1995-1996
Engineer	Automotive Connectors Div.	Parker Hannifin Corporation	1996-1998
Product Development Engineer	AMPCO Division	Hart and Cooley, Inc.	1998-2003
Adjunct Instructor	Engineering Technology	The University of Memphis	1999-2002
Assistant Professor	Engineering Technology	The University of Memphis	2003-2009
Associate Professor	Engineering Technology	The University of Memphis	2009-pres.

HONORS/AWARDS

HONOR/AWARD	INSTITUTION/COMPANY/ORGANIZATION	YEAR
The Honor Society of Phi Kappa Phi	The University of Memphis	2003
Certificate of Appreciation	Society of Manufacturing Engineers	2005
Resolution of Appreciation	Society of Manufacturing Engineers	2005
Nominated for Thomas W. Briggs Excellence in Teaching Award	The University of Memphis	2006
Who's Who in America	Marquis Who's Who	2007
2009 Featured Engineer	Memphis Joint Engineers Council	2009
Nominated for Alumni Association Distinguished Advising Award	The University of Memphis Alumni Association	2010

TEACHING EXPERIENCE:

SUBJECT (indicate Undergraduate (U), Graduate (G), Other)	INSTITUTION
Computer-Aided Drafting and Design (U/G)	The University of Memphis
Computer-Aided Manufacturing (U)	The University of Memphis
Fundamentals of AutoCAD (Corporate Training, US & Mexico)	Hart and Cooley, Inc.
Graphics and Descriptive Geometry (U)	The University of Memphis
Industrial Materials (U)	The University of Memphis
Industrial Statistics (U)	The University of Memphis
Manufacturing Processes I (U)	The University of Memphis
Manufacturing Processes II (U)	The University of Memphis
Principles of Supervision (U/G)	The University of Memphis
Production Processes (G)	The University of Memphis
Senior Thesis (U)	The University of Memphis
Senior Project Planning Seminar (U)	The University of Memphis
Statistical Quality Control (U/G)	The University of Memphis
Strength of Materials (U)	The University of Memphis

RESEARCH/SCHOLARSHIP/ CREATIVE ACTIVITIES:

PUBLICATIONS (authors, title, reference) include material in press and accepted for publication.

Refereed conference publications

Williams, C. R. & Hewitt, R. W. (2006, January). *Assessing and weighing outcomes for curriculum enhancement in a Manufacturing Engineering Technology Program*. Paper presented by Carl Williams at the Conference for Industry and Education Collaboration, San Antonio, TX.

Hewitt, R. W. (2007, January). *Leveraging Computer-Aided Design (CAD) Software to Perform Visual Data Mining Operations*. Paper presented at the ASEE Engineering Design Graphics Division Annual Conference, San Diego, CA.

Hewitt, R. W. (2007, April). *Using a Two-Cycle Engine to Integrate Manufacturing Engineering Technology Curriculum*. Paper presented at the ASEE Southeast Region Annual Conference, Louisville, KY.

Hewitt, R. W. (2007, November). *Polylines to Paperweights: A Streamlined Experience in Product Realization*. Paper presented at the ASEE Engineering Design Graphics Division Annual Conference, Virginia Beach, VA.

Hewitt, R. W. & Banning, T. E. (2008, April). *Applying the Key Findings of the EWEP Needs Assessment Final Report to a Single-Gender Outreach Program*. Paper presented at the ASEE Southeast Region Annual Conference, Memphis, TN.

Furxhi, O., Jacobs, E. L. & Hewitt, R. W. (2011). *Two-Dimensional Real Time, Sub-Millimeter Wave Imaging Using a Spatially Selective Mask*. Paper to be presented at SPIE 2011.

Nonrefereed publications

Hewitt, R. W. (2003, Spring) Quick-Draw: an AutoLISP-based software application to increase HVAC system design productivity. *The International Journal of Modern Engineering*. <http://www.21centuryengineer.com/spring2003.htm>

Hewitt, R. W. (2008, September) "How to Read a Vernier Caliper" Video recording supplement to the book *Western Math 10*. Mc Graw-Hill Ryerson, Whitby, ON.

Hewitt, R. W. (2010, March) "Sand Casting" Video recording (museum exhibit), Muskegon Heritage Museum, Muskegon Mi.

SUPPORT: If more than one person is involved, indicate your role (e.g., PI, CO-PI, consultant) and percent of effort on grant. (Use Appendix D to provide additional information as needed.)

EXTERNAL (Funded or Pending. List funded support first)	AGENCY/SOURCE	AMOUNT	PERIOD
Large-format Digitizing Tablet (PI)	Cingular Wireless	\$1,400 (90%)	Spring 2006
Sponsorship of Conferences and Student Activities	SME – Chapter 105	\$7,800 (33%)	Fall 2005 - Spring 2006
Manufacturing in My Future (PI)	UTC Carrier Corp.	\$10,000 (50% not funded)	Fall 2006
Girls in Manufacturing 2007 (Co-PI)	UTC Carrier Corp. and Cargill Corp.	\$15,000 (50%)	Summer 2007
Girls in Manufacturing 2008-10 (Co-PI)	UTC Carrier Corp., Cargill Corp.	\$37,000 (50%)	Summer 2008
Girls in Manufacturing 2009 (Co-PI)	Cummins, Inc.	\$1,000 (50%)	Summer 2009
Mx3 (Minds, Machines and Manufacturing) 2010 (Co-PI)	UTC Carrier Corp., Cargill Corp.	\$10,000 (50% not funded)	
U.S. First Robotics Integration	Memphis City Schools	\$40,000 (20%)	2011

OUTREACH: *(Project/s summarized as needed in Appendix E.)*

PROJECT	PARTICIPANTS	PERIOD	SPONSORSHIP (if any)
Judge – National Engineers Week Student Competition	Middle/Elementary School Students	2005-2010	Memphis Joint Engineers Council
Judge – TEAMS Competition	Local High School Students	2005-2006	The Junior Engineering Technical Society
Co-organized and attended “A Panel Discussion of Lean Experts”	Regional Members of SME	2005	Society of Manufacturing Engineers
Co-organized and attended the 2005 SME Student Poster Competition	Regional Students Members of SME	2005	Society of Manufacturing Engineers
Co-organized and attended the 2005 SME Student Development Conference	Regional Students Members of SME	2005	Society of Manufacturing Engineers
Co-organized and attended “Gaining Lean Leadership Confidence” Pre-conference seminar	Regional and national members of SME	2005	Society of Manufacturing Engineers
Co-organized and attended “Sustaining Lean through the Supply Chain” Panel Discussion	Regional and national members of SME	2005	Society of Manufacturing Engineers
Co-organized and attended the 2005 SME Professional Development Conference	National level conference of SME members	2005	Society of Manufacturing Engineers
Co-organized MJEC Engineers Week Kickoff Luncheon	Memphis Area Engineering Societies and Organizations	2006-2010	Memphis Joint Engineers Council
Taught “Drafting” Merit Badge Workshop	Scout Base Participants	2006	Boy Scouts of America
Co-organized and taught “Girls in Manufacturing”	Local high school girls	2007-2009	Carrier Corp., Cargill Corp., Univ. of Memphis
Taught “Drafting” Merit Badge Workshop	Chickasaw Council Boy Scouts	2008	Boy Scouts of America
Served as Student Contest Chair	Local middle and high school students	2010	Memphis Joint Engineers Council

SERVICE:

UNIVERSITY	COMMITTEE/ACTIVITY (if Chair, add [C])	PERIOD
Department	Tenure and Promotion Committee [C]	2010-Present
	Ongoing maintenance and repair of laboratory equipment in ET112, ET120, and ES323	2003-Present
	Curriculum development to incorporate Unigraphics design and manufacturing software into the METH Program	2004-Present
	Curriculum development to incorporate newly acquired HAAS vertical CNC machining center and CNC lathe into METH program	2005-Present
	Undergraduate Curriculum Committee	2003-Present
	Program Coordinator	2005-2009
	MET Industrial Advisory Committee [C]	2004-2009

College/School	College Newsletter Committee	2004
	College Awards Committee	2005-Present
	Associate Dean Search Committee	2010
	Tenure and Promotion Committee	2010-Present

OTHER		
Society/Organization/Journal	COMMITTEE/EDITORIAL BOARD/OFFICE (if Chair, add [C])	PERIOD
Society of Manufacturing Engineers	Student Member, Chapter S140 (Chair-elect, 1996)	1995-1998
Society of Automotive Engineers	Affiliate	1996-1997
Institute of Packaging Professionals	Student Member	2003
Society of Mfg. Engineers	Senior Member, Chapter 105 (Chair, 2005)	2003-2010
Memphis Joint Engineers Council	U of M Primary Representative (Secretary, 2005-2006; Co-Chair 2007; Chair 2008)	2003-Present
Southwest Tennessee Community College	Industrial Advisory Committee	2005-Present
American Society for Engineering Education	Professional Member	2005-2010

CONSULTING: *(Optional Appendix F may be used.)*

ORGANIZATION/COMPANY	PERIOD
The Baddour Center, Senatobia, MS Work design and optimization	2004
Ducks Unlimited, Memphis, TN Magazine illustrations	2006

Appendix C

Additional Information on Research/Scholarship/Creative Activities

Patents

Hewitt, R. H. & Renfro, T. L. (2000) *U.S. Patent No. 6,155,607, Quick Connect Coupling*. Washington, DC: U.S. Patent and Trademark Office.

Related Industrial Experience

Hart & Cooley, Inc. (1998-2003)

Product Development Engineer

Designed commercial and residential gas appliance venting products and systems

Designed punch press tooling

Authored parametric cost analysis software (Visual Basic)

Authored non-linear regression analysis software (Visual Basic, LISP)

Authored parametric 3-D solid model generator (LISP)

Improved functionality of LISP-based system design software

Established and maintained testing laboratory and wrote test procedures

Conducted agency approval testing (UL & Warnock Hersey)

Wrote manufacturing, drafting, and testing standards and material specifications

Wrote HTML-based product support literature

Conducted corporate AutoCAD training (US & Mexico)

Programmed CNC equipment (Laser/Plasma/Turret Punch)

Wrote programming guides for CNC programming software

Parker Hannifin, Inc. (1996-1998)

Engineer

- Designed fluid-handling components for automotive applications
- Designed patented quick connect coupling (USPTO #6,155,607)
- Oversaw reliability testing of components
- Designed tube end-forming tooling
- Researched manufacturing processes (magnetic pulse welding, induction brazing).
- Performed statistical quality control analysis for division headquarters
- Provided support engineering for five manufacturing plants
- Authored quality, design, and manufacturing standards (QS9000)

Coleman Engineering, Inc. (1990-1996)

Product Development Engineer (1995-1996)

- Designed and developed diesel-powered electric generators and lighting equipment
- Designed and coordinated development of the "Rite-Lite", Coleman's best selling product
- Coordinated fabrication, purchasing, assembly and testing of prototypes
- Wrote product manuals and user's guides
- Programmed CNC equipment
- Provided support engineering to two sister companies (Knight Kiln Co., C & C Coatings)

Engineering Technician (1990-1995)

- Designed components for diesel generator sets and light towers
- Wrote and illustrated product manuals
- Developed a component documentation system
- Provided engineering support to purchasing department
- Provided cost data analysis for General Manager
- Assisted in design and installation of 30,000 square foot powder-coat facility
- Authored various LISP, QBASIC, and C++ utilities

Summary of Products Developed

- Diesel-powered lighting equipment, Coleman "Rite-Lite" (now manufactured by Terex Corporation as RL4000)
- Diesel generator sets, Coleman 15-350kw Quiet-Pac generators
- Automotive engine/transmission oil cooler coupling, Parker Hannifin
- Automotive A/C quick-connect coupling, Parker Hannifin (Patented)
- Direct-Vent gas chimney product line, Hart & Cooley
- High wind Type "B" gas vent caps, Hart & Cooley
- Commercial positive-pressure venting components, Hart & Cooley