Free engineering dissertation topics

Profession

1. Introduction to Engineering Dissertations – FREE ESSAY EXAMPLES – our site

The field of engineering elapses across a wide range ofacademicdisciplines that are starkly distinguished from each other. Researches within this field mostly involves finding new ways to improve human life and developing new methods, materials, designs for existing solutions.

One of the most prominent contemporary research areas in civil engineering relates to the development of Green Infrastructure. Construction of sustainable houses, roads, highways, bridges, and buildings is a top priority within this field of engineering. Likewise, effective utilization of natural and man-made resources is one of the top agenda. In mechanical engineering, emphasis is upon developing and improving materials, designs and processes to achieve greater efficiency in terms of energy consumption, enhancing safety and improving industrial processes. Electronic and Computer Engineering aims to achieve these objectives through electronic circuit based and computer aided solutions respectively. Highlights within Chemical and Biochemical Engineering involves developing materials for nanotechnology, utilizing organic materials as fuels, and chemical processes related tofoodand water. Here are some of the topics that may be good for developing your own dissertation in various fields of engineering.

2. Categories and List of Dissertation Titles

2. 1Civil Engineering

2. 1. 1 Creating an Integrated Water Management Model to Evaluate Potential Water Savings for a Specific Project

2. 1. 2 Developing a Rating System for Sustainable Waste Water Management System

2. 1. 3 Improving the Predictability of Transit Boardings Estimation and Simulation Tool (TBEST) Using Property Appraisal Data; Enhancing Stop Level Predictive Capability

2. 1. 4 Analyzing the Travelling Patters and Preferences of Elderly Through Various Socio-Demographic Factors.

2. 1. 5 Quantifying a Pavement Sustainability Framework for Pavement Engineering Practice in UK

2. 1. 6 Identifying the Material/Component Requirements and Practices for Repairing and Maintaining the Stone-Built Heritage of post 1920s UK Building Stock

2. 1. 7 Replacing Conventional Wood Materials With Bamboo Panels and Agricultural Waste; An Approach Towards Mitigating Negative Impacts ofDeforestation

2. 1. 8 Assessing IndoorEnvironmentQuality (IEQ) Effects of Ten Common Sustainable Building Materials Through the Evaluation of Their Chemical and Micro-Biological Characteristics; Evaluating Ozone Reactivity and VOC Emissions

2. 2Electrical Engineering

2. 2. 1 Identifying Patterns to Solve Recurring Design Problems in Specific Contexts in Ontology Based Applications

2. 2. 2 Identifying Novel Approaches for the Unconstrained Human Face Recognition

2. 2. 3 An in Depth Review of the Technologies Involved in the ProposedGoogleDriverless Cars; A Descriptive Account

2. 2. 4 Evaluating the Feasibility of Deploying Electric Solar Panels for Individual Household Units in Pakistan

2. 2. 5 Prospect of Wireless Resonant Power Transformation to Remote Sensors in Electronics through Unmanned Aerial Vehicle

2. 2. 6 Scalability, Elasticity and Efficiency Challenges Posed by Cloud Computing For Database Management Systems

2. 2. 7 Utilizing RFID for Electronic Identification in Livestock Tagging

2. 2. 8 Evaluating Alternate Methods for Standardizing Energy Efficiency of Distribution Transformers.

2. 3Mechanical Engineering

2. 3. 1 Identifying the Usability Issues Involved in Driving a Vehicle with Drive-by-WireTechnology

2. 3. 2 An Evaluation of the Emerging Developments in Geared Turbofan Engines

2. 3. 3 Conduction Roughness Parameters Analysis to Characterize Cylinders Liner Surfaces

2. 3. 4 Evaluating the Use of Electroless Nickel Coating on Aluminum for Surface Treatment of Cylinder Components

2. 3. 5 Using Stimulation Techniques to Optimize the ‘ Pistol Ring – Cylinder Liner’ Surface Texture for Combustion Engines

2. 3. 6 Formulating a Framework to Evaluate Existing Wireless Power Transfer Technologies

2. 3. 7 Energy Harvesting Techniques for Critical Electric Systems at Remote Railroad Crossing in UK; Directly Harnessing the Vertical and Downward Deflection of Rail Caused by Railway Traffic

2. 3. 8 The Effects of Tonal Noise from Mechanical Systems and Temperature Upon Human Comfort, Performance and Perception

2. 4Software Engineering

2. 4. 1 An Evaluation of Research in Component Based Software Engineering (CBSE). Evaluation the current status of empirical research

2. 4. 2 Enhancing Steganographic Techniques for Maximizing Hiding Capacity in Digital Imagery

2. 4. 3 Automating Facial Micro-expression Spotting through the Use of Strain Magnitude of Individual Facial Regions

2. 4. 4 Determining Critical Design Principles for Developing Successful Mobile Applications

2. 4. 5 An Evaluation of the Characteristics of Some of the Most Prolific Cyber Attacks in Recent Times; Like of Stuxnet and Flame and Those Launched Against US Banks.

2. 4. 6 Determining Critical Design Principles for Developing Successful Web Applications

2. 4. 7 Preventing Cyber Warfare and Attacks through Adapting Polycentric Governance Approach towards Cyber Security

2. 4. 8 Analyzing Security Risks in Cloud Computing; A Survey of Privacy and Threats

2. 5Chemical/Biochemical Engineering

2. 5. 1 Chemically Synthesizing Gold Nanoparticles for Bio-application. Characterization of Gold Nanoparticles

2. 5. 2 Patterning, Synthesizing, Surface Modification and Characterization of Carbon Electrodes for BioMems (biomedical microelectromechanical systems)

2. 5. 3 Evaluating the Suitability of Carbon Natotube for developing Nanocomposites to be used as a Packaging Material for The Food Industry in UK.

2. 5. 4 Combining Calcium Aluminates and Glass Ionomer Cements to Obtain a New Dental Material

2. 5. 5 Prospects of Biogas as an Alternate Energy Source for the Rural Community of an Underdeveloped Country. ACase Studyof an Indian State

2. 5. 6 Evaluating the Socio-Economic and Environmental Advantages of Biogas for the Rural Community of Pakistan

2. 5. 7 Measuring the Impact of Using Biogas Digester Upon theHealthBenefits and Quality of Life Improvement in Rural Areas of Pakistan/India/African Country (Anyplace where the primary source of fuel is wood)

2. 5. 8 Post Treatment Analysis for Water Quality Followed by Advanced Oxidation Processes

3. How to Write a Good Engineering Dissertation

The structural guidelines for writing an engineering dissertation are the same as writing any other dissertation. First and foremost, a high level outline should be made, followed by determining chapters and sub-sections of chapters.

Students usually make a critical mistake of sorting down number of words to be written for each chapter and sub-sections. However, an important tip in this regard for writingscienceand engineering dissertation is to add figures or placeholders for figures first throughout the dissertation. It would make the writing part much easier as the bulk of the content of an engineering dissertation is comprised of the description of these tables/diagrams/figures.

Is should be noted that presenting results of an engineering dissertation if often a very difficult task; therefore, the introduction, background, methodology chapters should not delay writing the main part of the dissertation.

When conducting experiments, it is always very tempting to keep on working to make some sort of improvements in every new attempt or try new things. However, one should stop doing experiments at least a month before the hand in date of the dissertation and start writing the report keeping in mind that even during the written work, there would always remain a need to do some quick work to prepare tables and figures.