MACS Corp's

A subsidiary of Jaguar Engineering Technology and Falcon Engineering and Technology

Leading the world to a new dimension in multimedia environments

Proposal Response to RFP NO MU 200302A
Renovation of Labs 111 A & B

Executive Summary

MACS Corp is a subsidiary of Jaguar Engineering Technologies and Falcon Engineering and Technology that provides services in the area of developing multimedia environments. Our company specializes in creating and designing multimedia rooms that are cultivating, cutting-edge, and that encourage learning in an technological environment. MACS Corp takes great pride in their staff and with this staff provides a sufficient amount of experience. MACS Corp take great pride in responding to the RFP NO. MU 200302A Proposal and aspire to provide a plan that is appealing.

Background/ Problem

Mercer University is a private post secondary institution founded in 1833 by Mr. Jessie Mercer. The institution is the second largest Baptist affiliated institution in the world which provides a wide variety of educational programs, liberal arts, business, engineering, medicine, theology, pharmacy, and law. Mercer University School of Engineering (MUSE) and the Mercer University School of Engineering Alumni Foundation is seeking to renovate Labs 111 A & B. to expand and provide a more efficient room for classroom and lab usage. The Labs 111 A & B shall undergo physical alterations, re-routing of wires, installation or upgrade of computers, replacement of furniture, instillation of fixed teacher workstation with a ceiling-mounted projector. MUSE also seeks the most up-to-date and finest multimedia equipment for the labs.

Figure 1: Mercer University Engineering Building

Solution

Our company would take great pride in providing MUSE with quality service and the most efficient plan to satisfy their needs. MACS Corp have a unique strategy for renovating the Labs 111 A & B. We plan to convert the labs into one large multimedia classroom with new and up-to-date technological equipment. Our team contrive to provide the best recommendations for the physical alterations of Labs 111 A & B to ensure a smooth construction renovation process.   Nevertheless, MACS Corp plan to install 30+ computers with software, students workstation furniture, fixed teacher lectern workstation with remote control ceiling mount projector and screen, printer/scanner stations, a group study table, and a small multimedia library. At the conclusion of the project MACS Corp will host a grand opening of the lab in which we will provide MACS Corp logo stress balls for all attendees. In our plan to renovate the labs, MACS Corp provides a multimedia-learning environment that is suitable to the interest of MUSE faculty and students. Our well-trained staff is more than capable to carry out the devised plan due to their experience in such project areas. MACS Corp project team has completed jobs for institutions and corporations such as Georgia Technical University, Verisign, and Auburn University. Our goal is to provide quality services that will lead MUSE to higher dimensions in academic learning.

Results

MACS Corp seeks only to provide quality equipment to the MUSE multimedia classroom at a reasonable price. Using our top secret formula MACS Corp provides a budget that MUSE can acquire the benefits of saving money as well as achieving their renovations goals. Our team only offer MUSE a budget that is realistic and cost effective. The greatest advantage is that MUSE will have an enlightening educational multimedia classroom. To achieve these goals MACS Corp is requesting a professional friendship and partnership with MUSE and proposing a budget cost of
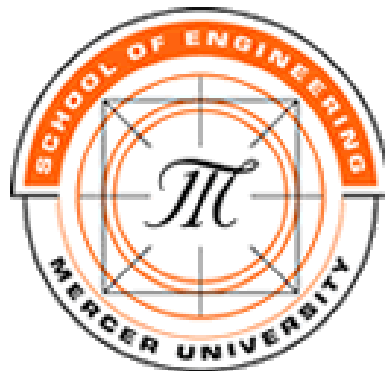
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Introduction

In the School of Engineering located at Mercer University, there are two computer laboratories that provide service to staff and students, but Lab 111B can only be occupied by 20 computer workstations due to the size and layout of the room. This creates a problem for the professors who hold sessions in this lab. There is only space for a class size of 20 or less, making the role lower than the average class size, which is 30. To resolve the situation at hand, Mercer University's School of Engineering (MUSE) has decided to renovate and expand Lab 111B so that it merges with Lab 111A, used by College Advancement, to create one large multimedia classroom that will offer access to the finest, most up-to-date computer equipment. The renovation and expansion plan will include specifications for physical alterations of the rooms, installation of new workstation furniture, computer equipment, wiring, and a fixed instructor workstation with a ceiling-mounted projector. A contractor that is or has been on the payroll of Mercer will handle all construction and the design and layout of the new classroom will be headed by MACS Corp.

Figure 2: MUSE Logo

As a merger of Falcon Engineering and Technology and Jaguar Engineering Technologies, the engineers of MACS Corp specialize in constructing and designing multimedia environments for various institutions and corporations. With a well-trained, dedicated staff that has years of experience and knowledge, MACS Corp is capable of providing innovative technology, a cutting-edge user-friendly environment, and a cultivating, encouraging setting designed for learning. Our corporation intends to encompass our skills with the plan drawn up by MUSE to design the best multimedia classroom/computer lab for the use of staff and students.   After the two labs are merged, we propose that new workstations be purchased to meet the request of students who would like a less cluttered writing area, which equates to more space. Because the teachers who hold class in Lab 111B must travel with a teacher's workstation on wheels, a fixed teacher's workstation, with locking capabilities, will be provided. There will be enough space so that all necessary equipment can be stored. This renovation and design can be implemented for MUSE for $114,872.93.
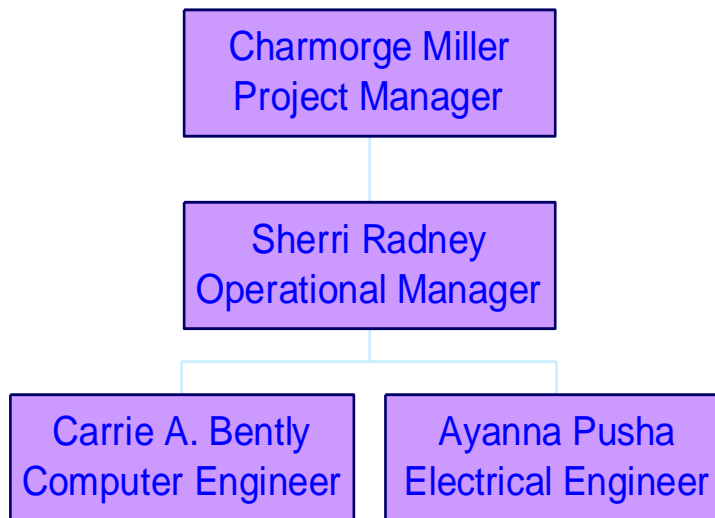
Management Approach

Introduction:

Here at MACS, we make a valiant effort to create the most efficient and effective multimedia facilities. Our qualified renovating teams and use of quality resources, is a large contributor to the success MACS has experienced over the years. Because MACS posses the previous mentioned assets, we developed a management plan that, if implemented, will transform MUSE labs 111 and 112 into a state of the art multimedia facility. The plan will include the following:

1. Project Management Team
2. Team Members Educational Background and Experience
3. Team Members Role in Project
4. Management Technique
5. Resources

Project Management Team:

The goal of this project is to renovate MUSE Lab 110 and 111B. These renovations should include physical alterations to the rooms, installation of new workstations (students and teachers), and computer equipment and wiring. Based on these specifications, MACS assembled a project management team that possesses the skills needed to accomplish the goal. The project management team is as followed:

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          ┌─────────────────────┐
          │  Charmorge Miller    │
          │  Project Manager     │
          └─────────────────────┘
                    │
          ┌─────────────────────┐
          │  Sherri Radney       │
          │  Operational Manager │
          └─────────────────────┘
                    │
         ┌──────────┴──────────┐
  ┌───────────────────┐  ┌───────────────────┐
  │  Carrie A. Bently  │  │  Ayanna Pusha      │
  │  Computer Engineer │  │  Electrical Engineer│
  └───────────────────┘  └───────────────────┘
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Figure 3: MACS Corp Organizational Chart

<u>Renovating Experience, Educational Background, and Responsibilities for Project</u>
The individuals on this project management team bring a total of 30 years of renovating experience as well as a strong educational background. Listed is the educational background and renovation experience of the each individual on this project management team as well as the job they will be perform in order to complete the project.

Charmorge Miller - Project Manager

<u>Educational Background:</u>
- Mercer University - B.S.E Industrial Engineering
- Georgia Technical University - MS Integrated Manufacturing Systems Engineering

<u>Renovating Experience:</u>
- Georgia Technical University Multimedia Facility

<u>Job Description:</u>
- Manages the entire project.
- Make sure entire project runs smoothly.
- Keep communication between workers and project team.

Sherri Radney - Operational Manager

<u>Educational Background</u>:
- Mercer University - B.S.E. Electrical Engineering
- Massachusetts Institute of Technology - MS Electrical Engineering

<u>Renovating Experience:</u>
- Auburn University Computer Center

<u>Job Description:</u>
- Responsible for hiring, scheduling, planning, and obtaining the required resources
- Ensures that project management team stay on schedule

Carrie Bentley - Computer Engineer

Educational Background:
- Mercer University - B.S.E Computer Engineering
- University of Southern California - MS Computer Engineering

Renovating Experience:
- Verisign Technology Multimedia facility

Job Description:
- Responsible for selecting multimedia equipment
- Responsible for installing multimedia equipment
- Responsible for installing computer software onto computers.

Ayana Pusha - Electrical Engineering

Educational Background:
- Mercer University - B.S.E Electrical Engineering
- University of California Berkley - MS Electrical Engineering

Renovating Experience:
- Savannah State University Student Computer Center

Job Description:
- Responsible for multimedia room layout
- Responsible for OSHA safety inspections
- Assures wiring and network setup

As shown above, each member on the project management team has great educational backgrounds as well as previous renovating experience on major projects allowing each member to perform the jobs that are essential in renovating MUSE labs. Resumes providing additional information members' educational background and renovating experience can be found in Appendixes blah through blah.

Past Performance:

MACS has assembled a project management team that have solid educational background and renovating experience. As a result this team has developed a plan that we believe will allow them to turn MUSE into a great multimedia facility.

MACS Renovating Team possesses 30 years of renovating experience. Some of

Renovating jobs performed are:
- Mercer University International Students computer lab and Learning Center
- Auburn University Student Computer Center
- Georgia Institute of Technology Multimedia facility
- Verisign Technologies Multimedia facility
- Savannah State University Student Computer Center

Technical Approach

Introduction:

Mercer University School of Engineering (MUSE) wants to renovate and expand Labs 111 A&B into a classroom that will provide faculty and students with the finest and up-to-date technical equipment available. MUSE has made a request that the following specifications are made to the labs: physical alterations of the rooms, installation of new workstation furniture, computer equipment, and a fixed workstation with a ceiling-mounted project.

Our Solution:

MACS Corp approach to redesigning Labs A&B is to convert the labs into a multimedia classroom with state of the art technical equipment. In order to achieve these goals, we have developed the following objectives:

- Design a room layout that will enhance and encourage academic learning
- Purchase a teacher workstation, 32 computer desk, and 4 tables
- Purchase 33 Dell Computers (including teacher computer)
- Install upgraded and licenses software on the computers
- Provide a small multi-media library to allow faculty and students to check out equipment such as digital cameras, video cameras, etc.
- Provide easy access to scanner and printer stations

MACS Corp's coarse of action in redesigning Labs 111 A&B will be reasonably priced and will supply an instructive environment for the faculty and students of MUSE. MACS Corp will remove all computers, furniture, scanner, and printers from Labs 111 A&B and place them in the desired location specified by MUSE. In the construction phase of the project, MACS Corp recommends that the wall that separates Lab 111 A&B be removed as well as the sink, cable boxes in closing the wires, and pipes located against the walls in Lab 111 A. Once the removal process has been completed, MACS Corp proposes that the floor is raised in order for the electrical work to be placed underneath. There is to be enough electrical wiring to support 33 or more computer units. We suggest remote control blinds in order for instructors to close blinds with quickness and ease. Furthermore, MACS Corp recommends the MUSE installs dimming lights to be able to adjust lights for efficient learning environment.
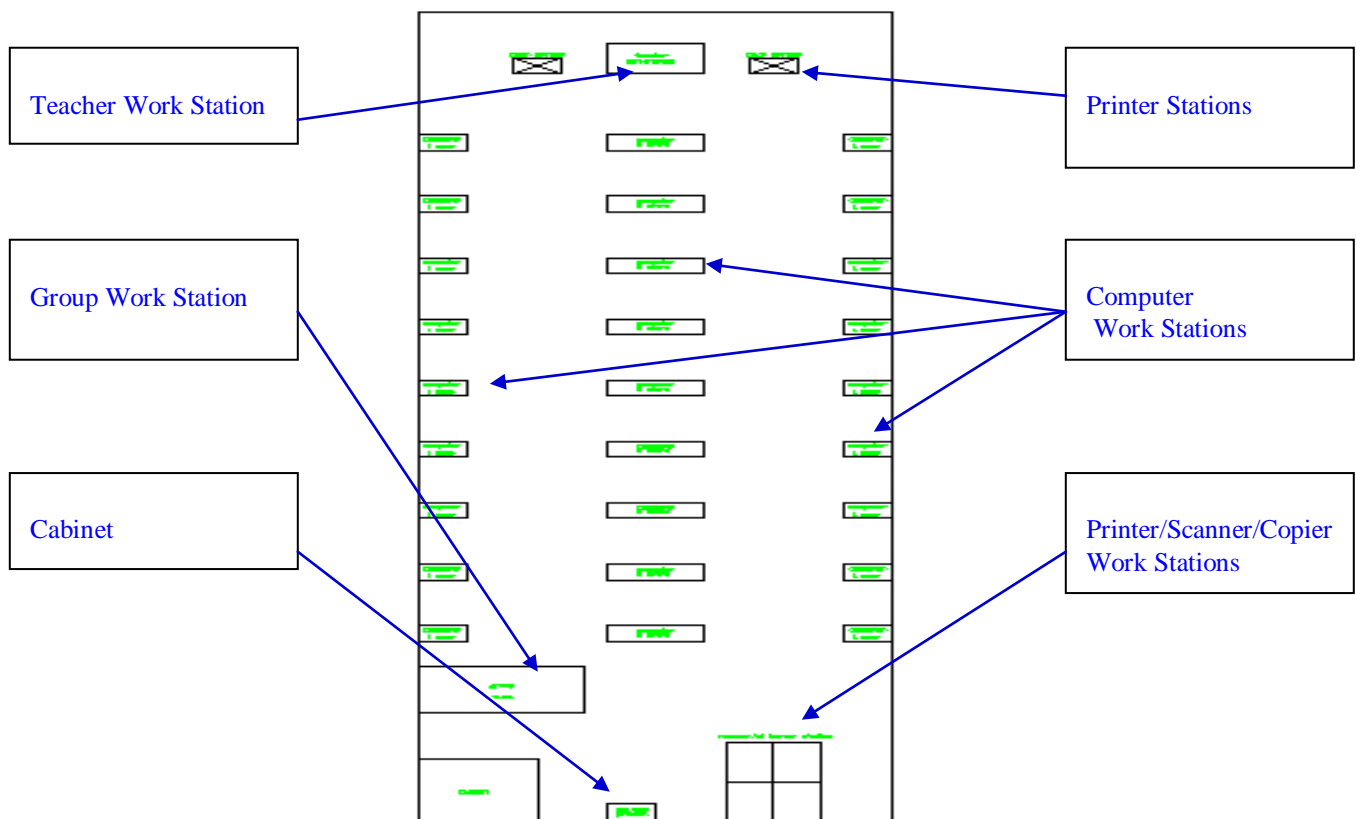
Since MACS Corp believes in cutting-edge technology, 33 new computers will be purchased from Dell and installed. MUSE has asked that 10 new software packages be added along with the already existing software to the 33 new computers purchased. In this new classroom there will be a small multimedia library that will contain 2 digital cameras, 2 video cameras, 3 tape recorders, and 1 microphone. MACS Corp recommends that the multimedia library be supervised by a lab assistant outside of class sessions.

Facilities and Equipment Overview

Layout:
- Teacher's workstation located in front of classroom
- 2 color printers placed at both ends of the teacher's workstation
- Student workstations layout will consist of 4 rows and 7 columns, 1 row located on each wall, and 2 rows located down the center of the room
- Group area located at rear of the room
- Scanner/Printer station consisting of 4 computers with 4 scanner/printer/fax machines
- 1 black/white printer island located at rear of classroom
- 1 storage cabinet placed at rear of classroom next to printer island
- 1 ceiling projector screen positioned behind the teacher's workstation
- 3 trash cans, 2 for recycling (1 in front and 1 in rear of classroom), 1 for food and beverages (in front of classroom by entrance)

Figure 4: Multimedia Classroom Layout

Multimedia Equipment:

Da-Lite Cosmopolitan Electrol Electric Ceiling Screen

The Da-Lite Cosmopolitan Electrol electric ceiling screen is ideal for applications where a recessed installation is not desired or feasible. Patented in-the-roller motor mounting system for quiet operation. Handsome white textured case blends with any decor. (Available in sizes 50" x 50" up to 12' x 12')

Sony Omnidirectional Dynamic Vocal Microphone
Model: F-V100

Compact and easy to carry microphone with a wide frequency response of 100Hz – 10kHz. The microphone cord length is 9' 8" with a uni-match plug. Includes is a 1 year warranty on parts and for labor.

Dell 3200MP Projector

- Bright 1,300 ANSI Lumens (Max)[1]
- Super high contrast ratio of 1800:1 (Full on/Full off)
- 3.5 lbs.; small form factor: 9.4 x 7.4 x 2.9 inches (234 x 189 x 74 +/-1 mm)
- Integrated zoom lenses keystone connection
- DLP^{TM} DDR technology from Texas Instruments
- Native XGA Resolution with auto sync to UXGA (1600 x 1200)
- Great connectivity — supports S-Video, Composite Video (RCA), Component Video and analog and digital inputs
- Supports full range of television and video standards, including NTSC, PAL, SECAM, and HDTV (480p, 480i, 720p and 1080i)
- Built-in 2 watt amplifier and speaker
- Video out — to display image on external PC monitor (monitor loop through)
- Up to 3-year limited warranty[2] with Advanced Exchange Service[3] (90 days on bulb)
- Includes hard shell carrying case and wireless remote control with laser pointer

Lexmark Multifunction Printer/Copier/Scanner
Model: X5150

- Minimum System Requirements: Windows 98, 2000, ME or XP; Mac OS 9.2.2 or OS X; USB port
- Print Speed: Up to 19 ppm(B&W) and up to 14 ppm (Color)
- Printer Resolution: Up to 4800 x 1200 dpi (B&W and Color)
- Able to print on plain paper, envelopes, coated paper, photo and glossy paper, transparencies, card stock, index cards, photo cards, postcards, Hagaki cards, labels, iron-on transfers, and banner paper media types
- 100 sheets input paper capacity
- Flatbed scanner with up to 600 x 2400 dpi optical (up to 19,200 dpi enhanced) resolution
- Software included: ABBY Fine Reader OCR, BVRP Fax, installation software CD
- 1- year warranty on parts and labor

Kodak Easy Share 2.0-Megapixel Zoom Digital Camera
Model: CX4230

- Size: 2.6" x 4.5" x1.6" ; Weight 7.8 oz.
- 1623 x 1232 pixels image resolution
- Multimedia Card and Secure Digital image storage media and capacity
- 2.0 megapixels Imaging Sensor Resolution
- 3x optical/2x digital zoom/6x total Lens with 35mm equivalent 36-108mm focal lengths
- 1.6" color LCD Viewfinder
- Date and time Text Overlay
- Accessories Included: CR-V3 lithium battery, video-out cable, USB cable, wrist strap, Kodak EasyShare software CD; documentation, custom camera insert for optional Kodak EasyShare camera dock (sold separately)
- Software: Kodak EasyShare software CD
- 1 year warranty on parts

LCD Sony Digital 8 Handycam Camcorder with 2.5" Swivel Screen
Model: DCR-TRV250

Size: 4" x 3.6" x 7.9"; Weight: 1lb 12oz
- Zoom: 20x (Optical) and 700x (Digital)
- Auto recording
- Accessories include:
    - Power adapter/in-camera charger (AC-L15),
    - Info Lithium rechargeable battery (NP-FM30),
    - Wireless Remote Commander remote (RMT-814),
    - 2 AA batteries,
    - A/V cable, lens cap, shoulder strap, and USB cable,
    - CD-ROM with USB driver
- 90 days labor warranty
- 1 year parts warranty

Hewlett-Packard DeskJet Color Printer
Model: 5550

- Size: 6.2" x 17.9" x 15.2"; Weight: 11.6 lbs
- Minimum System Requirements: CD-ROM drive; Windows 95, 98, NT 4.0, 2000, ME or XP; Mac 8.6 to 9.x
- Print Speed: 17 ppm (B&W) and 12 ppm (Color)
- Printer Resolution: 1200 x 1200 dpi (B&W) and up to 4800 x 1200 optimized dpi (Color)
- Able to print on paper (plain, inkjet, photo, banner), envelopes, transparencies, labels, index cards, HP premium media, iron-on transfers labels, index cards, HP premium media, iron-on transfers media types
- 8MB memory
- Photo quality and 2 sided printing accessory
- 3 Print modes: fast , normal, and best
- 1 year parts and labor warranty

Dimension 2350 Dell Computer

- Intel Pentium 4 processor with 2.4 GHz
- Memory:1GB Shared[1] DDR SDRAM at 266MHz for superior performance
- Ultra ATA EIDE Hard drive with 120 GB[2] to meet your storage needs
- Dual optical drive bays with CD-RW/DVD+RW/+R combination drives to meet your multimedia needs.
- Integrated Intel® Extreme 3D Graphics
- 17" CRT Flat panel monitor
- Integrated AC97 Audio and brand-name speakers

3M 9700 Overhead Projector AJJ 120/60HZ

- Portable
- Size 36.1 x 42.5 x 71.1 cm; Weight 9.9 kg
- 4300 ANSI lumens
- Mounting kit included
- 5 years warranty

Brother Black-and-White Laser Printer

Model: HL-1440

- Minimum System Requirements: Windows USB: Windows 98, 2000, ME or later; Windows parallel: Windows 95, 98, NT 4.0, 2000, ME or later; Macintosh USB: Mac OS 8.5.1 or later
- Print Speed: 15 ppm; Printer Resolution: 1200 x 600 dpi
- Able to print Plain paper, bond, envelopes, labels, transparencies media types
- 2 MB memory
- Software: Animated interactive help, automatic e-mail printing, status monitor, printer drivers
- 1 year parts and labor warranty

Furniture:

Inspace II Modular Work Center Peninsula, Granite Finish

This commercial-quality workstation features 1" melamine work surfaces that resist scratches, stains and burns. Can be constructed for right- or left-handed use (drawers must be placed on opposite sides of the peninsula). This collection is ready-to-assemble a covered by a 5-year manufacturer's limited warranty. Computer desk features one spacious box drawer, a file drawer (holds letter or legal), keyboard shelf, mobile CPU platform and monitor platform.
www.staples.com

Black Fabric Manager Chair
Item # 20214965 , Style # 892-1477

Tilt and swivel capabilities; Pneumatic gas height adjustment from 38"-41 ½"; Thick foam seat; Pillow headrest; 5-Star resin base with dual wheel casters; Available in black fabric; Seat cushion dimensions: 21"D x 21"W; Exceeds ANSI/BIFMA standards; Assembly Required.
www.officemax.com/max/solutions/products

Global Deluxe Drafting Chair:

Attractive fabric upholstery over heavy foam padding; Pneumatic seat height adjusts from 21" to 31"; Back features manual height and depth adjustment; Adjustable chrome foot ring; Meets or exceeds ANSI-BIFMA standards; Ready to assemble; 15-year mfr. limited warranty; Available in Black or Gray.
www.staples.com

Quartet™ 6' x 4' Melamine Board with Aluminum Frame Dry Erase Board:

Item # 518928 for Dry Erase Board
Whiteboard surface with heavy-gauge anodized aluminum frame
www.staples.com

Software:

Window XP Professional:

Microsoft® Windows® XP Professional is the next version of the Windows operating system, which is designed for businesses of all sizes, and for individuals who demand the most from their computing experience. Windows XP Professional goes beyond the benefits of Windows XP Home Edition with advanced capabilities designed specifically to optimize productivity using the latest advancements in the digital world. Built on the solid foundation of Windows 2000, Windows XP Professional provides improved reliability, security, performance and ease of use, setting the new standard in efficient and dependable computing.
www.microsoft.com/licensing

MS Project 2002:

Microsoft Project 2000 is the result of an enormous research and development effort focused on this entire spectrum of customers and offers major feature additions and enhancements. Microsoft Project 2000 provides knowledge workers with the flexibility to collaboratively plan and track projects and deliver the results their business demands. It is the single planning tool needed in an organization. In addition a new companion product Microsoft Project Central is being introduced to work closely with Microsoft Project 2000. Microsoft Project Central is a Web-based collaborator.
www.microsoft.com/licensing

VS.NET Profession:

Visual Studio .NET is a superb, next-generation development tool. At its heart is the .NET Framework, a runtime engine and class library that enables rapid application building for both Windows and Web applications. The runtime engine handles housekeeping tasks, like memory management, while also providing fine-grained security and version awareness. The class library reduces the code needed to build rich applications. Visual Studio .NET also provides a slick visual environment, with features like tabbed and docking windows, dynamic online help, and automatic code completion and hints.
www.microsoft.com/licensing

Windows 2000 Professional:

Focusing on the needs of the technical professional who is responsible for a series of Windows NT and Windows 2000 systems, The Windows 2000 Professional Handbook is designed to be both a handy desk reference in addition to a textbook for MCSE courses. This book provides readers with insights into how Microsoft's latest enterprise-based operating system solves the connectivity challenges with hands-on examples and cases that arise in organizations running multiple operating systems.
www.microsoft.com/licensing

MS Office XP Professional:

Microsoft Office XP Professional puts the features you need within easy reach at all times. New and improved tools in Access allow you to build and manage lists and databases, or analyze information from databases such as Microsoft SQL Server. New context-sensitive smart tags pop up with options you need--right when you need them. No digging through menus. Tasks that once required multiple steps are just one click away with the new task pane. The new version of Outlook in Office XP Professional condenses all your personal and professional e-mail into one central location, even your Web-based e-mail accounts like Hotmail. With Auto Recover, your work is saved at regular intervals while you work. PowerPoint includes animation effects and custom slide transitions. An editable print preview assures that your printed slides and documents come out right the first time. Office XP Professional also includes Word 2002 and Excel 2002.
www.microsoft.com/licensing

Inspiration 7.0:

Powered by the proven techniques of visual learning, Inspiration® 7 supports improved achievement for all students. Retaining the core functions that have made Inspiration the premier tool to develop ideas and organize thinking, Inspiration 7 introduces significant new capabilities to improve the visual learning experience for students and teachers. This new version provides more powerful support for critical thinking, comprehension, and writing in language arts, social studies, science, and planning.
www.inspiration.com/store/main

Adobe Photoshop 7.0:

Adobe® Photoshop ® 7.0 software, the professional image-editing standard, helps you work more efficiently, explore new creative options, and produce the highest quality images for print, the Web, and anywhere else. Create exceptional imagery with easier access to file data; streamlined Web design; faster professional-quality photo retouching, and more.
www.adobe.com/products

Adobe PageMaker 7.0:

Adobe® PageMaker® 7.0 software is the ideal page layout program for business, education, and small- and home-office professionals who want to create high-quality publications such as brochures and newsletters. Get started quickly with templates, graphics, and intuitive design tools; work productively across Adobe applications; and easily leverage existing content to create customized communications.

www.adobe.com/products

Scansoft Kai's Power Show:

Create and play home photo shows or enhance business presentations the fast, fun, and easy way with Kai's Power SHOW. Turn dull presentations into multimedia shows that get noticed. From home to office, SHOW is perfect for families, business presenters, teachers, artists, and hobbyists because it works great with digital photos, PC PowerPoint slides, pictures, and even video clips. It's easy to add instant special effect transitions, TV-like text animation, and sound clips (voice annotation and sound effects) to produce shows with pizzazz. Share your presentations via computer monitor, projector, printer, the included SHOW Player software, and the Web.
www.scansoft.com/powershow

Sound Forge Studio 6.0:

Sound Forge Studio includes much of the same award-winning technology found in Sound Forge, Sonic Foundry's professional digital audio editor. This streamlined version makes it easy to record, edit, and process audio using your PC. Record from a CD, microphone, LP, cassette, or musical instrument, and then edit your recording using a wide range of tools and effects. Liven up presentations, recordings, and music using over 30 digital audio effects and processes, including 1001 Sound Effects. Create your own "Best Of" audio CDs using track-at-once CD burning.
www.creationengine.com/sonicfoundrylicense

Macromedia Studio MX:

Deliver the intuitive and responsive experiences your users demand. Macromedia Studio MX provides a highly integrated and approachable solution — with everything you need to create the full spectrum of Internet solutions, from websites to web applications and Rich Internet Applications. Macromedia Studio MX is Dream Weaver MX, Macromedia Flash MX, Fireworks MX, Free Hand 10, Cold Fusion MX Developer Edition (Windows Only), and Macromedia Flash Player 6.
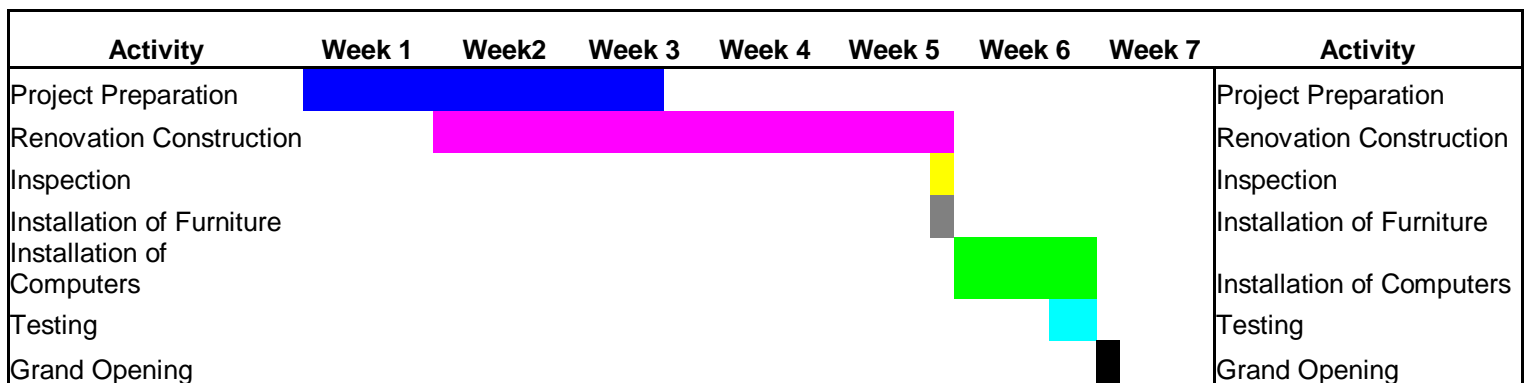**www.macromedia.com**

Operational Section

Introduction:

MACS Corp specializes in multi-media renovation. With our state of the art formula we provide a virtuoso learning and teaching class setting. With this unique class setting we pinpoint students attention to one main focal point to help them to concentration more on the teacher's lesson. We also want to appeal to the students needs and assist them in making the most of this new multi-media classroom. To accomplish this we want to add a multi-media library for students to borrow equipment to complete labs, projects, etc. Also to inform students, faculty, and staff of the new classroom/lab, we will hold a Grand Opening session. This session will consist of a complete breakdown of all the equipment, software, and features. We also will provide training for the day to all faculties on all new software. The estimated scope of this renovation project is approximately 7 weeks. The estimated price for this proposal is $88,888.

Schedule:

MACS Corp has developed a renovation plan for Mercer University School of Engineering Lab 111-B. This plan entails complete removal of all equipment, furniture, sink, walls, and blackboards. During the construction/removal of these items, MACS Corp will begin hiring employees needed and ordering of all equipment. Once the construction tasks are competed, we will have our highly trained OSHA staff test wiring and all other safety issues. Only after their approval will we begin moving of the furniture and installation of computers and software. After the installation is complete we will have our Computer and Electrical Engineering team come in to test the computers and outlets. Subsequently we will then host the grand opening of the computer lab with a presentation of the new features, software, and equipment in the lab. We will also provide support and training to faculty and staff throughout the day. The estimated scope of the renovation is 7 weeks. The precedence of tasks are shown below:

Figure 5: Scheduling Gantt Chart of Renovation Project

Project Preparation

Before the project can begin, the project management team must make all of the necessary preparations. This includes hiring an engineering staff to assist in the renovations, finding the best resources, and making all of the necessary safety precautions. Operational Manager Sherri Radney is responsible making all of these preparations. (Allotted Time: 2.5 weeks)

Renovation Construction

Renovation construction on MUSE lab 111 A & B will begin in the second week of the 8 week plan. During this phase, a team of qualified engineers will begin making physical alteration specified by the client. During this phase, Electrical Engineer Ayana Pusha will to wire the multimedia room. (Allotted Time: 4 weeks)

Inspection

After the renovations phase, a representative from the Occupational Safety and Health Administration (OSHA) will survey the room to see if all safety regulations are met. (Allotted Time: 1 day)

Installation of Furniture

Once the safety regulator clears the room, the engineering staff will then begin to install furniture into the renovated room. This includes students and teacher workstation, computers, scanners, chairs, and tables, and cabinet (Allotted Time: 1 day)

Installation of Equipment

After all Furniture is installed, Computer Engineer Carrie Bently will set up all equipment. This includes connecting computers to servers, installing requested software on all computers and setting up the multimedia library. In addition to setting up the computer, all scanner and printers will also be installed. (Allotted Time: 1 week)
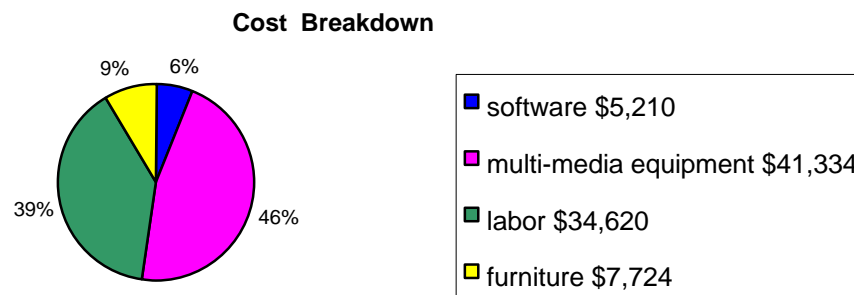
Testing

Once computers are installed, the entire project management team will test the efficiency of the entire multimedia room. This includes testing the furniture, computers, printers and scanners, and library. (Allotted Time: 2 days)

Grand Opening

Once the lab is completed, the project management team will host a grand opening. At this opening, teachers and students will be allowed to use the lab and give feedback. Everyone will also receive a MACS Corp logo stress ball.

Cost and Budget

The estimated cost of the complete renovation of Lab 111-B is $88,888. This price includes all software, multi-media equipment, furniture, and labor. The prices are broken down as follows:

Cost Breakdown

- software $5,210
- multi-media equipment $41,334
- labor $34,620
- furniture $7,724

Figure 6: Cost Breakdown Pie Chart (above) and **Figure 7:** Cost Analysis (below)

Item	Quantity	Cost	Total Cost
Ceiling projector	1	$2,178.45	$2,178.45
Electric overhead screen	1	$608.00	$608.00
Dell Computers	33	$1,092.00	$36,036.00
Printer/scanner/fax	4	$149.99	$509.97
Digital camera	2	$199.99	$339.98
Camcorder	2	$399.99	$679.98
Microphone	1	$9.99	$8.49
Overhead projector	1	$501.95	$501.95
Visual Studio	1	$825.00	$825.00
Inspiration 7.0	1	$895.00	$895.00
Scan Soft Kai's Power show	33	$19.95	$658.35
Sound Forge Studio	1	$895.00	$895.00
Microsoft Project 2000	1	$445.00	$445.00
Photoshop 7.0	2	$609.00	$1,218.00
Macromedia Studio MX	1	$697.00	$697.00
Adobe Page Maker 7.0	2	$499.00	$998.00
XP Developer Edition	1	$213.95	$213.95
32 gallon container	3	$20.30	$60.90
Storage Cabinet	1	$203.99	$203.99
Student Desks	32	$129.99	$4,159.68
Chairs	33	$99.98	$3,299.34
Color Printers	2	$129.99	$220.98
Black and White Printer	1	$249.99	$249.99

- The software price includes all packages specified and licensing for all 33 of the computers within the new lab.
- The multi-media pricing includes a ceiling projector, electric overhead screen, 33 Dell Computers, 4 multi-function printers, 2 digital cameras, 2 camcorders, a microphone, an overhead projector, 2 color printers, and a black and white printer.
- The labor pricing contains all salaries of personnel required to complete the thorough renovation of Lab 111-B.
- The furniture estimate includes the teacher's workstation, student desks, chairs, garbage and recycling containers, whiteboard, and the storage cabinet for the new student media library

Appendices

Detail Budget

Furniture	Price
32 gallon container	$60.90
Storage Cabinet	$203.99
Student Desks	$4,159.68
Chairs	$3,299.34
Dry-EraseBoard	$149.00
Teacher's Chair	$89.94
Teacher's Workstation	$3,138.00
TOTAL	*$11,100.85*

Labor	Weekly rate
Project Manager	$11,200.00
Computer Engineer Supervisor	$2,400.00
Electrical Engineering Supervisor	$2,400.00
Engineers from Jet and Feat(6)	$13,248.00
Safety Inspector	$800.00
Personnel Manager	$1,500.00
Operational Manager	$3,072.00
TOTAL	*$34,620.00*

Multi-Media Equipment	Price
ceiling projector	$2,178.45
electric overhead screen	$608.00
Dell Computers	$36,036.00
printer/scanner/fax	$509.97
digital camera	$339.98
camcorder	$679.98
microphone	$8.49
overhead projector	$501.95
color printers	$220.98
black and white printer	$249.99
TOTAL	*$41,333.79*

Software	Price	Licensing Price	# 0f Licensing
Windows XP Professoinal	$199.00	$77.00	33
MS Project 2002	$199.00	$53.00	33
VS.Net Profession	$99.95	$52.00	33
Windows 2000 Professoinal	$139.00	$65.00	33
MS Office XP Profess.	$199.00	$67.00	33
Inspiration 7.0	$1,790.00	included	40
Adobe Photoshop 7.0	included	$150	33
Adobe PageMaker 7.0	included	$145	33
Scansoft Kai's Power St.	$658.35	N/A	N/A
Sound Forge Studio	$52.00	$45.00	33
Macromedia Studio MX	$899.99	$2,000.00	500 or less
TOTAL	$4,236.29		$23,582.00
Software Price	$4,236.29		
Licensing Price	$23,582.00		

Budget Summary	
Software Price	$4,236.29
Licensing Price	$23,582.00
Multi-Media Equipment	*$41,333.79*
Labor	*$34,620.00*
Furniture	*$11,100.85*
TOTAL	$114,872.93

Vendors Information

www.projectus.net/elwacesc.html

Electric Ceiling Screen:
Model: Da-Lite Cosmopolitan Electrol Electric   CeilingScreen

www.dell.com

Computer:
Model: Dell Dimensions 2350

Projector:
Model: Dell 3200MP Projector

www.bestbuy.com

Printer/Scanner/Fax:
Model: X5150 Lexmark Multifunction Printer/Copier/Scanner

Digital Camera:
Model: CX4230 Kodak Easy Share 2.0 Megapixel Zoom Digital Camera

Camcorder:
Model: DCR-TRV250 LCD Sony Digital8 Handycam Camcorder with 2.5"
Swivel Screen

Microphone:
Model: F-V100 Sony Omindirectional Dynamic Vocal Microphone

Color Printer:
Model: 5550 Hewlett-Packard DeskJet Color Printer

Item # 20214965 , Style # 892-1477