User Guide
MES-ERP

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Table 1: Revision History

Date	**Author(s)**	**Change**
April 3, 2025	Sufyan Motala	Created guide based on final webapp.

Contents

1 Introduction

1.1 Purpose of MES-ERP

The MES-ERP (McMaster Engineering Society - Expense Reporting Platform) is a web-based application designed to streamline financial operations for the MES and its associated student groups. It provides a centralized platform for submitting, tracking, and managing reimbursement requests, payment requests, and budgets efficiently and transparently.

1.2 Purpose of this Guide

This guide provides instructions on how to effectively use the MES-ERP platform based on your assigned role(s). It covers common tasks, navigation, and key features to help you manage your financial activities.

1.3 User Roles Overview

The platform uses a Role-Based Access Control (RBAC) system. Your capabilities within the application depend on the role(s) assigned to you. Common roles include:

- **Regular User:** Can submit personal requests and view their status.
- **Club/Group Admin:** Can manage requests, budgets, and potentially users/roles for specific groups they oversee.
- **System Admin (MES Staff/Exec):** Has broad access to manage users, roles, groups, requests, budgets, and system-wide settings.

2 Getting Started

2.1 Accessing the Platform

The MES-ERP platform is accessible via a web browser on desktops and laptops (Windows, macOS, Linux). It is also accessible on mobile devices (iOS, Android). Ensure you are using a modern browser like Chrome, Firefox, or Edge. The main URL is https://macengsociety.ca/erp.

2.2 Logging In

1. Navigate to the login page (typically the application's root URL or `/login`).
2. Enter your registered email address and password.
3. Click the **Login** button.
4. Upon successful login, you will be redirected to your dashboard (`/dashboard/home`).

[Screenshot Placeholder: Login Page]

2.3 Registering a New Account

1. From the login page, click the **Register** link.
2. Enter your email address and choose a secure password.
3. Click the **Register** button.
4. You may need to check your email to confirm your registration before you can log in.
5. Upon first login after registration, a user profile will be created for you with a default "user" role.

[Screenshot Placeholder: Registration Page]

2.4 Dashboard Overview (`/dashboard/home`)

This is your main landing page after logging in. It provides a quick overview of relevant statistics based on your role:

- **Regular Users:** See stats for *your* submitted requests (count, total amount).
- **Club Admins:** May see stats for *your club's* requests (total count, amount, pending count) in addition to your personal stats, depending on permissions.
- **System Admins:** See system-wide stats (total requests, total amount, pending count, total users).

[Screenshot Placeholder: Dashboard Home Page]

2.5 Navigating the Platform (Header & Sidebar)

- **Header:** The header (maroon/dark blue bar at the top) contains the main navigation links (Home, Requests, Users, etc.). The links visible depend on your permissions. It also includes theme toggles, a link to this guide (`/dashboard/guide`), and the user menu (profile icon).
- **User Menu:** Clicking the profile icon in the header opens a dropdown to access your "Account" page (`/dashboard/accountInfo`) or "Sign Out".

[Screenshot Placeholder: Header with Nav Links and User Menu]

2.6 Theme Selection (Light/Dark)

Click the Sun/Moon icon in the header to toggle between light and dark themes. Your preference is saved locally in your browser.

3 Guide for Regular Users

3.1 Viewing Your Dashboard (`/dashboard/home`)

See section 2.4 for details. Your dashboard shows stats specific to *your* activity.

3.2 Submitting Payment/Reimbursement Requests (`/forms`)

1. Navigate to the **Requests Page** via the header link (`/dashboard/requests`).
2. Ensure the **Payment Requests** tab is selected.
3. Click the **Create New Payment Request** button. This redirects you to `/forms`.
4. **Fill out the form:**
   - **Group Selection:** Select the Club/Group this request is for from the dropdown. This is crucial.
   - **Basic Info:** Verify or fill in your name, email, phone. Select "Who Are You?" (e.g., MES Position, Club Member).
   - **Receipt Upload:** Upload an image (PDF, JPG, PNG) of your receipt OR provide a direct link to the receipt image. The system may attempt OCR to extract the total amount automatically.
   - **Role & Budget:** Select your role and the relevant budget line for this expense.
   - **Approval Info:** Enter the name of the individual or project approved for this expense.
   - **Team Info (If applicable):** Select sport/team name, conference details if relevant.
   - **Payment Details:** Specify if it's a Reimbursement or Payment, the currency, the amount requested (verify if OCR filled it), payment timeframe (date), and preferred payment method (E-Transfer, Direct Deposit, Cheque).

- **Payment Method Details:** Provide necessary details based on your chosen method (e.g., email for E-transfer, bank info for Direct Deposit, address for Cheque).

5. Review all information carefully.
6. Click the **Submit** button. You should see a confirmation message.

[Screenshot Placeholder: Reimbursement Form]

3.3 Tracking Your Request Status (`/dashboard/requests`)

1. Navigate to the **Requests Page**.
2. The **Payment Requests** tab will display a table listing *only* the requests you have submitted.
3. The table shows the request details and the current `Status` (e.g., Submitted, In Progress, Approved, Rejected, Reimbursed).
4. You will receive email (and potentially SMS if configured) notifications when the status of your request is updated by an admin.

[Screenshot Placeholder: Requests Page showing User's Requests]

3.4 Managing Your Account Information (`/dashboard/accountInfo`)

1. Access this page from the user menu in the header.
2. View your profile details (email, name, phone number, default payment preference).
3. Click the pencil icon next to editable fields (like phone number, payment preference) to make changes.
4. Enter the new value and click the checkmark icon (✓) to save, or the X icon (X) to cancel.
5. **Note:** Your email address and assigned roles are usually not editable here and must be changed by an administrator.

[Screenshot Placeholder: Account Info Page]

4 Guide for Club/Group Admins

(Requires specific permissions like `view_club_requests`, `manage_club_requests`, etc.)

4.1 Dashboard Overview (Club-Specific)

Your dashboard (`/dashboard/home`) may show aggregated statistics for the specific club(s) you manage, such as total requests, total amount spent, and pending requests within those clubs, in addition to your personal stats.

4.2 Viewing Club Requests (Payment & Budget) (`/dashboard/requests`)

1. Navigate to the **Requests Page**.
2. The tables here will display requests associated with the group(s) you have permission to view.
3. Use the tabs (**Payment Requests**, **Budget Requests**) to switch between request types for your group(s).

4.3 Managing Club Requests (Approving/Rejecting)

(Requires `manage_club_requests` permission)

1. On the **Requests Page**, you will see controls (e.g., a dropdown menu) in the "Status" column for requests belonging to your group(s).
2. Select a new status (e.g., "Approved", "Rejected") from the dropdown to update the request.
3. Updating a *payment request* status triggers an email/SMS notification to the submitter.

4.4 Submitting Payment Requests for Your Club (`/forms`)

Follow the same process as Regular Users (Section 3.2), ensuring you select the correct Club/Group in the form.

4.5 Submitting Annual Budget Forms (`/dashboard/annual_form`)

(Requires relevant budget permissions)

1. Navigate to the **Annual Budget Form** page (via sidebar or the "Budget Requests" tab on the Requests page).
2. Fill out the detailed form with projected income and expenses for the specified budget year for your club.
3. Submit the form for review by MES Finance/Execs.

[Screenshot Placeholder: Annual Budget Form]

4.6 (Optional) Managing Club Members (`/dashboard/users`)

(Requires `manage_club_users` permission)

1. Navigate to the **Users** page.
2. You will see a list of users *only within the group(s) you manage.*
3. You may be able to assign group-specific roles (see below) to these users or potentially remove users *from your group.* You cannot manage users outside your assigned groups.

4.7 (Optional) Managing Club Roles (`/dashboard/roles`)

(Requires `manage_club_roles` permission)

1. Navigate to the **Roles** page.
2. You can view, create, or modify roles *that are specifically assigned to your group(s).*
3. You typically cannot create roles with high-level administrative permissions. Assign only the permissions needed for club operations.

5 Guide for System Admins

(Requires permissions like `manage_all_users`, `manage_all_roles`, `manage_groups`, `view_all_requests`)

5.1 Dashboard Overview (System-Wide)

Your dashboard (`/dashboard/home`) shows system-wide statistics, including total requests across all groups, total amounts, pending counts, and the total number of users.

5.2 Managing All Users (`/dashboard/users`)

1. Navigate to the **Users** page.
2. View the complete list of all users in the system.
3. Assign/remove roles (including global roles) and assign/remove users from any group using the interface provided in each user's row.

[Screenshot Placeholder: Users Management Page]

5.3 Managing All Roles & Permissions (`/dashboard/roles`)

1. Navigate to the **Roles** page.
2. Click **Create New Role** to open a dialog.
3. Define the role name, select permissions (across Admin, Club, User categories), and choose if it's a Global Role or assign it to a specific group.
4. Edit existing roles using the Edit (pencil) icon.
5. Delete roles using the Delete (trash) icon (usually only possible if no users are assigned that role).

[Screenshot Placeholder: Roles Management Page]

5.4 Managing Groups (`/dashboard/groups`)

1. Navigate to the **Groups** page.
2. Click **Create New Group** to add a new club/organization.
3. Edit group names directly in the table (if enabled) or via an edit action.
4. Delete groups using the Delete (trash) icon (typically only if no users or roles are assigned to them).

[Screenshot Placeholder: Groups Management Page]

5.5 Viewing & Managing All Requests (`/dashboard/requests`)

1. Navigate to the **Requests** page.
2. View *all* payment and budget requests submitted across the entire system.
3. Use the status controls in the tables to approve or reject *any* request.

5.6 Managing the Operating Budget (`/dashboard/operating_budget`)

1. Navigate to the **Operating Budget** page.
2. This interface allows detailed management of group budgets.
3. Add/remove groups using the buttons.
4. Add/remove budget line items within groups using the "+ Add Row" and "Remove" buttons.
5. Edit allocated amounts for different budget years (e.g., `col_2024_2025`) and line item labels directly in the table cells. The Change column (`col_change`) is usually calculated automatically.
6. Reorder rows within a group by dragging and dropping.
7. Use the **Save All** button to persist changes made on the page.

[Screenshot Placeholder: Operating Budget Page]

5.7 Viewing System Analytics (`/dashboard/analytics`)

1. Navigate to the **Analytics** page.
2. View dashboards and charts summarizing financial activity across the *entire system*.
3. Analyze spending trends, status distributions, group spending, budget utilization, etc. Use the tabs ("Overview", "Detailed Analysis") for different views.

[Screenshot Placeholder: Analytics Page]

6 Key Features Overview

- **Reimbursement Form & OCR:** The `/forms` page allows detailed submission of requests. It includes an OCR feature to automatically read the total amount from uploaded receipt images (PDF, JPG, PNG).
- **Budget Management:** The `/dashboard/operating_budget` page provides a powerful interface for admins to manage detailed budget lines for all groups. The `/dashboard/annual_form` allows clubs to submit their yearly budget requests.
- **Role-Based Access Control (RBAC):** The system uses a flexible RBAC model where permissions are tied to roles, and roles can be global or specific to certain groups. Users can hold multiple roles across different groups.
- **Notifications (Email/SMS):** Users are automatically notified via email (and potentially SMS if phone numbers are configured and Twilio is set up) when the status of their payment requests changes.
- **Analytics Dashboard:** The `/dashboard/analytics` page offers various charts and tables to visualize financial data, helping with oversight and decision-making.

7 Troubleshooting & FAQ

- **I can't log in.**
  - Ensure you are using the correct email and password.
  - Try resetting your password via the link on the login page (if available).
  - If you registered recently, check your email for a confirmation link.
  - Contact MES support if problems persist.
- **Why can't I see requests from other clubs?**
  - Access is based on your assigned roles and permissions. Regular users typically only see their own requests. Club Admins see requests for their specific club(s). Only System Admins can see all requests.
- **My request status hasn't changed.**
  - Processing times can vary. Please allow a few business days for review. You will receive a notification when the status is updated. If it takes unusually long, contact your club admin or MES Finance.
- **The OCR didn't read my receipt amount correctly.**
  - OCR accuracy can depend on image quality and layout. Please manually verify and correct the "Amount Requested" field in the form if the OCR result is inaccurate.

8 Contact Information

For technical issues or questions about using the MES-ERP platform, please contact:

- MES ERP Support: *[motalas@mcmaster.ca]*
- MES Finance: *[schuurml@mcmaster.ca]*