



Mechanical and Aerospace Engineering

Emergency Action and Evacuation Plan

In compliance with:

California Code of Regulations

Title 8, Section 3220

Implementation Date:	14 September 2017		
Annual Review Date*:	20 March 2019	05 April 2023	
	_____	_____	_____
	22 April 2020		
	_____	_____	_____
	04 March 2021		
	_____	_____	_____
	13 April 2022		
	_____	_____	_____

*Reviewed and initialed by Department Safety Coordinator

Introduction

An Emergency Action & Evacuation Plan (herein referred to as an EAP) covers designated actions employers and employees must take to ensure employee safety from emergencies. [Cal-OSHA regulations](#) require employers to establish, implement and maintain an EAP. The program must be in writing and include the following elements:

- The preferred means of reporting fires and other emergencies
- A system to alert and notify employees of an emergency
- Evacuation types, procedures and emergency escape routes
- Procedures for employees who remain to operate critical plant operations before they evacuate
- A procedure to account for all employees after an emergency evacuation is completed
- Rescue and medical duties for those employees who are able to perform them
- Names or regular job titles of persons or departments who can be contacted for further information or explanation of duties under the plan

Contact Information

This EAP has been prepared for UC Davis *Mechanical & Aerospace Engineering Department*. The plan complies with California Code of Regulations, Title 8, Section 3220.

Mechanical and Aerospace Engineering

(Office Name)

2132 Bainer Hall, One Shields Ave, Davis, CA 95616-5294

(Office Location)

530-752-0580

mae-dsc@ucdavis.edu

(Phone)

(email)

Dr. Benjamin Shaw

530-754-2397

bdshaw@ucdavis.edu

(Department Chairperson)

(Phone)

(email)

Krasen Kovachev

530-752-8488

kdkovachev@ucdavis.edu

(Department Safety Coordinator)

(Phone)

(email)

Felicia Smith

530-752-0582

fasmith@ucdavis.edu

(Dept Manager, Alternate Safety Contact)

(Phone)

(email)

This Emergency Action & Evacuation Plan will be reviewed annually in:

April

Emergency Protocols-Alert and Notification

Reporting Emergencies:

In the event of an emergency, UC Davis employees should contact UC Davis Dispatch by dialing **9-1-1** from a land line or from a cell phone call 530-752-1230.

You should call 9-1-1:

- In the event of a medical emergency
- To report all fire incidents, *even if the fire is extinguished*
- To report criminal or suspicious behavior
- If you are in doubt about the seriousness of a situation, such as any possible situation that you believe may be serious and that may result in injury, death, loss of property, apprehension of a suspected criminal or prevention of a crime that is about to occur.

For any extinguisher usage, you should immediately alert the UC Davis Fire Prevention at (530) 752-1493

Provide the following information to UC Davis Dispatch upon calling:

- Where you are
- The address or location of the event
- Brief description of the nature of this emergency

Alert and Notification of Employees:

The university has a variety of ways to alert employees and students to emergencies and provide direction. These include:

- Audible alarms
- Visual alarms/signals
- Verbal notification
- UC Davis WarnMe / Aggie Alert
- Social media

The department itself will use the following methods to provide alerts and notifications to its employees:

Primary Method: *Audible and visual building alarms*

Additional notifications: *Verbal and email communication, UC Davis WarnMe*

All MAE personnel is strongly encouraged to sign up for the UC Davis WarnMe emergency notification system (<https://warnme.ucdavis.edu>)

Emergency Protocols-Evacuation

Evacuation Procedures & Routes

Many incidents (*e.g.* building fire, police response) could require an evacuation of all or part of the campus. All employees must evacuate the building when notified to do so. The type of evacuation or protective measure may be specified as part of the notification. Please refer to Policy & Procedure [390-10](#) for more information on Campus Emergency Policy.

Evacuation Types

- **Evacuation:** Evacuation is total building or partial building evacuation due to conditions making it no longer safe to remain inside a building or a specific area in a building. This level of evacuation requires occupants to move out and away from the building being evacuated.
- **Controlled Evacuation:** Controlled evacuation is total building or partial building evacuation due to safety conditions or an armed intruder making it no longer safe to remain inside a building or specific area in a building. This level of evacuation requires occupants to move out and away from the building once notified.
- **Shelter-in-Place:** Shelter-in-place means selecting a small interior room, with no or few windows, and taking refuge there; it does not mean sealing off your entire office. Shelter-in-place is used in emergency situations where hazardous materials have been released into the atmosphere or in emergencies related to civil unrest or violent demonstrations.
- **Lock Down:** Lockdown is the temporary sheltering technique utilized to limit exposure to an armed intruder or similar incident. When alerted, occupants of a building within the area of concern will lock all doors and windows, not allowing entry or exit to anyone until the all clear has been sounded. If you are in a ground floor office or common area, take precautions and move away from glass windows or doors and seek shelter in a locked room of office.

Prior to Exiting

After being notified to evacuate, stop all work activities and evacuate immediately. Securely close departmental and office doors behind you. You may choose to lock your doors to prevent property theft (the UC Davis Fire Department has keys to campus buildings and rooms if access is necessary). Remember that you may not be allowed back into the building for an extended time.

Evacuation Routes/Exiting the Building

During an emergency evacuation, use the nearest door or stairway if available. Each employee needs to be aware of at least two exit routes in their main building in the event one is compromised.

All campus buildings over one story high must have building evacuation signs posted on every floor.

The signs must be posted at all stairway and elevator landings and immediately inside all public entrances to the buildings. More information on this is available in the FireNet [Emergency Evacuation Signs](#).

Persons involved with developing the EAP need to address how to evacuate colleagues with special needs that are unable to evacuate on their own. More information and guidance on this topic can be found in the FireNet [Guidelines to Emergency Evacuation Procedures for Employees/Clients with Disabilities](#).

Discuss with your Department Safety Coordinator, Krasen Kovachev, if you or a member of your group might need assistance.

Assembly Area

After exiting the building, all employees, students, volunteers, and visitors should follow the evacuation route to the pre-arranged assembly area.

The Department Director/Dean/Chair should assign an Assembly Area Manager to each evacuation location. List all buildings in which department members are assigned space and the corresponding assembly areas and manager.

Bainer Hall and WTB #1, South of Silo Krasen Kovachev, Felicia Smith

Bainer Hall and WTB #2, South of Bainer main entrance Krasen Kovachev, Felicia Smith

NOTE: The assembly areas for other buildings and labs could be found in the evacuation maps on pages 10 to 13 of this plan. Follow your laboratory-specific evacuation plan and assembly area.

All employees should stay within your respective group at the Assembly Area. No one should leave the area until notified by the First Responders, Assembly Area Manager, or Responder Liaison.

Assigned Job Responsibilities

Assembly Area Manager Duties:

It is recommended that the senior employee or their designee acts as the Assembly Area Manager. The Assembly Area Manager should be responsible for taking roll call and therefore it is imperative that *prior* to an emergency the Department Safety Coordinator (DSC) and Assembly Area Manager work together to ensure an updated employee roll call sheet is available and accessible at the time of the emergency. Ideally, the person responsible for roll call will take a personnel list (use attached form or alternate) before leaving the building. The Assembly Area Manager should report any injuries in need of immediate care to First Responders. Any other minor injuries should be documented and reported through the proper chain of command to Dr. Bahram Ravani, Department Chairperson.

The Assembly Area Manager is responsible for sharing information as it becomes available to the evacuated persons. The Assembly Area Manager *should not leave* the assembly area; therefore, it is suggested the Assembly Area Manager assign a liaison to the First Responders.

Responder Liaison Duties:

The Responder Liaison ensures important communication and information exchange between the First and Second Responders (e.g. Fire, Police, Facilities), and the Area Assembly Manager. The Responder Liaison (whom may be the DSC if present) is responsible for informing the on-scene Incident Commander of the status of department employees and visitors. Responder Liaisons should be prepared to provide the following information (if known)

- Nature of the emergency (e.g. fire)
- Location of the emergency
- Number of persons trapped
- Number of persons hurt
- Number of persons unaccounted for

If needed, the Responder Liaison should recruit volunteers to help direct and contain evacuees to the Assembly Area.

After a major incident, building occupants may not re-enter buildings until cleared by a campus official.

Procedures for Employees Who Remain to Operate Critical Operations

Safety is a top priority at UC Davis, and there are no critical operations worth risking one’s welfare to perform. If you believe your department has critical operations requiring an employee(s) to remain in the building during an evacuation (most departments will not), please contact [UC Davis Office of Emergency Management and Mission Continuity](#) to develop this section of the plan.

AED / CPR Training

UC Davis relies on the UC Davis Fire Department and partnering agencies to provide rescue and medical assistance. It may be useful to document employees in your department who have specialized medical training.

Not applicable to MAE at this time

Employee Name	Type of Training	Certification Date
Employee Name	Type of Training	Certification Date
Employee Name	Type of Training	Certification Date
Employee Name	Type of Training	Certification Date

The individuals listed above should not practice outside their scope of training and are not expected or required to assist in any emergency or medical situation.

Responsibilities of the Department Safety Coordinator

Krasen Kovachev and Felicia Smith are responsible for implementing essential elements including planning, evaluating, and implementing the EAP. The following duties must be performed to maintain an effective EAP:

- Review and update the EAP annually or as needed.
- Update and submit the [Emergency Call List](#) to the [UC Davis Dispatch Center](#).
- Train employees on the location of emergency exits, fire extinguishers, manual pull stations, first aid kits, and AEDs if applicable.
- Ensure evacuation routes are posted and walkways remain clear at all times.
- Train employees annually on the EAP, including the “Additional Training” sections. Ensure all new hires are familiar with the procedures and a copy of the plan is made available. **Document all training.**
- Train the Assembly Area Managers, Responder Liaisons, and Alternate Department Safety Contact. Confirm they understand their duties as assigned in the plan.
- Exercise your department’s EAP annually. It is recommended you exercise your plan in the following order:
 1. **Conduct a Tabletop Exercise.** This will allow departments to use their training on the EAP, as well as to work through any inefficiencies *prior* to an emergency. Contact the [UC Davis Office of Emergency Management and Mission Continuity](#) for training or assistance with your tabletop exercise.
 2. **Schedule a Building Evacuation.** The UC Davis Fire Department can perform a limited number of building evacuations each month. Advanced notice and coordination between the departments that share your building **before** the exercise is critical. The Fire Department **will not** conduct the exercise if coordination between department DSCs has not occurred. Please contact your [Department Safety Coordinator](#) to schedule an exercise. Evacuations will be scheduled on a first come first serve basis and times and dates will be decided based on the Fire Department’s availability. To schedule a fire drill, please contact the [UC Davis Fire Department](#).

Signatures

This EAP has been reviewed and approved by the following individuals:

<p>DocuSigned by: <i>Benjamin Shaw</i> D73E17672A7744F...</p> <hr/>	<p>4/6/2023</p> <hr/>
<p><i>(Dr. Benjamin Shaw, Department Chairperson)</i></p>	<p><i>(Date)</i></p>

The Safety Contact and Alternate are aware of their responsibilities, as described in this plan:

<p>DocuSigned by: <i>Krasen Kovachev</i> 5FF414812074477...</p> <hr/>	<p>4/5/2023</p> <hr/>
<p><i>(Krasen Kovachev, Department Safety Coordinator)</i></p>	<p><i>(Date)</i></p>
<p>DocuSigned by: <i>Felicia Smith</i> 3DF09C41B16E43A...</p> <hr/>	<p>4/6/2023</p> <hr/>
<p><i>(Felicia Smith, Department Manager / Alternate Safety Contact)</i></p>	<p><i>(Date)</i></p>

Additional Comments:

Emergency Procedures

Campus

Police

- Disruptive behavior
- Harassment
- Gun related incidents
- Theft/break-in/robbery
- Trespass/illegal activity
- Bomb/terror threats

Fire

- Any fire
- Any discharge of a fire extinguisher

Hazardous Spills

- Chemical fumes and gas leak
- Radioactive agents
- Biological/infectious agents

Ambulance

- Any serious injury/medical emergency

Utilities

- Electrical
- Water
- Steam
- Sewer
- Heating
- Ventilation
- Elevator

Dial
9-1-1
or
530-752-1230
UCDPD
emergency line

Give:

- Description of emergency
- Your name
- Your location (building, room)
- Any other information requested

Report by calling
530-752-1655

Earthquake

- If in building, get under a table, desk, or bench. Avoid windows
- Leave building by stairs after shaking has stopped
- When outside, stay clear of buildings and overhead hazards
- Proceed to building emergency assembly area

Evacuation

- If alarm does not sound, hit fire alarm button
- Close but do not lock doors, use posted exits
- Proceed to building emergency assembly area

Emergency assembly areas as indicated in map and below:
(Circle your lab's designated location):

1. Bainer Hall North
2. Bainer Hall South
3. Kemper Hall
4. TB207
5. Academic Surge West
6. Academic Surge East



Emergency Procedures

Spafford

Police

- Disruptive behavior
- Harassment
- Gun related incidents
- Theft/break-in/robbery
- Trespass/illegal activity
- Bomb/terror threats

Fire

- Any fire
- Any discharge of a fire extinguisher

Hazardous Spills

- Chemical fumes and gas leak
- Radioactive agents
- Biological/infectious agents

Ambulance

- Any serious injury/medical emergency

Utilities

- Electrical
- Water
- Steam
- Sewer
- Heating
- Ventilation

Dial
9-1-1
or
530-758-3600
Davis PD
emergency line

Give:

- Description of emergency
- Your name
- Your location (building, room)
- Any other information requested

Report by calling
916-223-7856
Greg Gordon
(ACCO)

Earthquake

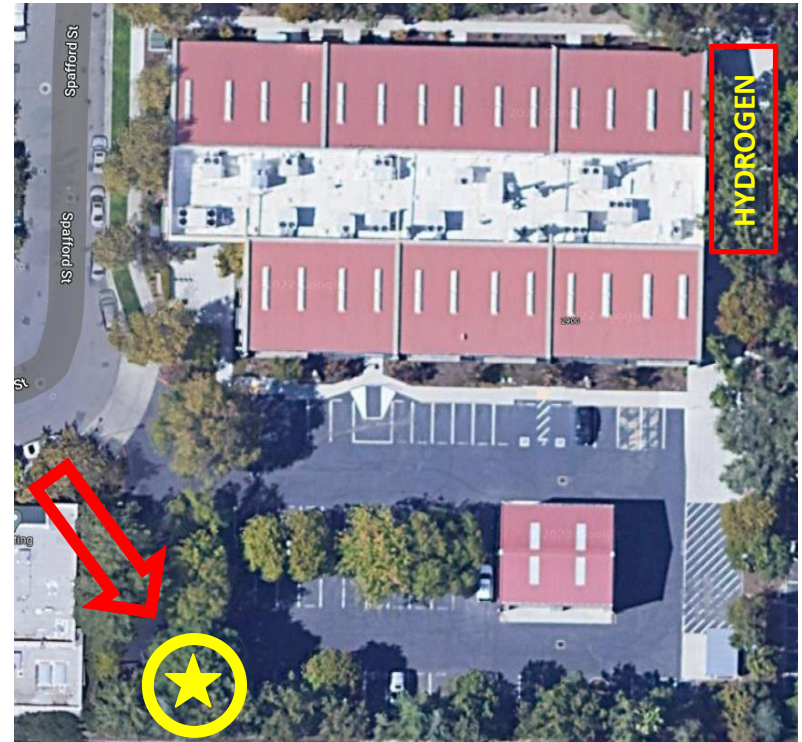
- If in building, get under a table, desk, or bench. Avoid windows
- Leave building by stairs after shaking has stopped
- When outside, stay clear of buildings and overhead hazards
- Proceed to building emergency assembly area

Evacuation

- If alarm does not sound, hit fire alarm button
- Close but do not lock doors, use posted exits
- Proceed to building emergency assembly area

Emergency assembly area - as indicated in the map below:

- ★ South-West corner of parking lot, away from Hydrogen gas tanks



Emergency Procedures

Police

- Disruptive behavior
- Harassment
- Gun related incidents
- Theft/break-in/robbery
- Trespass/illegal activity
- Bomb/terror threats
- Trapped in elevator

Fire

- Any fire
- Any discharge of a fire extinguisher

Hazardous Spills

- Chemical fumes and gas leak
- Radioactive agents
- Biological/infectious agents

Ambulance

- Any serious injury/medical emergency

Utilities

- Electrical
- Water
- Steam
- Sewer
- Heating
- Ventilation
- Gas leak
- Elevator

STEEL

Dial

9-1-1

or

530-752-1230

UCDPD

emergency line

Give:

- Description of emergency
- Your name
- Your location (building, room)
- Any other information requested

Report by calling

530-752-1655

Earthquake

- If in building, get under a table, desk, or bench. Avoid windows
- Leave building by stairs after shaking has stopped
- When outside, stay clear of buildings and overhead hazards
- Proceed to building emergency assembly area

Evacuation

- If alarm does not sound, hit fire alarm button
- Close doors, and use posted exits
- Proceed to building emergency assembly area

Emergency assembly areas for following buildings indicated in map:

- ★ Solar Dish Site (STEEL)



ATIRC EMERGENCY PROCEDURES

POLICE

- Disruptive behavior
- Harassment
- Gun related incidents
- Theft/break-in
- Trespass/illegal activity
- Bomb/terror threats

FIRE

- Any fire
- Any discharge of a fire extinguisher

AMBULANCE

- Any serious injury/medical emergency

DIAL 911 FROM ANY PHONE.

Give:

- Description of emergency
- Your name
- Location/building name as:
ATIRC, 3327 Apiary Drive
- Any other information requested

EVACUATION

- Hit fire alarm button
- Close and unlock doors, use posted exits
- Proceed to parking lot on east side of ATRIC



EARTHQUAKE

- Vacate building if possible, move to center of parking area. Stay away from powerlines and street lights.
- If in building, climb under table or workbench. Exit building as soon as possible after shaking has stopped.
- Proceed to parking lot on east side of ATRIC

UTILITY RELATED EMERGENCY

- Report to 530-752-1655

ROBBERY/HOSTAGE

- Follow perpetrator's instructions. Do not attempt to apprehend. Observe features and clothing.
- Call 911 after robber leaves

STAFF EMERGENCY CONTACT NUMBERS

UCPRC

John Harvey	<i>(Principal Investigator)</i>	510-206-8349
David Jones	<i>(Principal Investigator)</i>	530-574-0724
Jeff Buscheck	<i>(Lab manager)</i>	530-304-8941
Dave Miller	<i>(Safety coordinator)</i>	916-215-3374

AHMCT

Ty Lasky	<i>(Principal Investigator)</i>	530-752-6366
Dave Torick	<i>(Lab mngr/Safety coord.)</i>	530-752-5579
Krasen Kovachev	<i>(Dept. Safety Coord.)</i>	530-752-8488

Roll Call Sheet

Mechanical and Aerospace Engineering - Main office

Office Location: Bainer Hall 2132

Krasen Kovachev and Felicia Smith are responsible for maintaining a current list of personnel in the department. This form can be used, or, if your department currently has a directory, you can format it into a roll sheet with room and building location and attach it to the EAP. Assembly Area Managers and DSCs should have a copy to complete roll call during an emergency.

Employee Name	Work Phone (530)-	Cell/ Other Phone	Room/Building	Status/ Location
Benjamin Shaw	754-2397	NA	Bainer 2004	
Brenda Luis	752-0581	NA	Bainer 2132B	
CeCe Coyle	752-6256	NA	Bainer 2132D	
Felicia Smith	752-0582	NA	Bainer 2006	
Geoffrey Murry	752-2267	NA	Bainer 2132C	
Henry Grace	754-1346	NA	Bainer 2101	
Jennifer Young	752-8564	NA	Bainer 2132	
Jessica Rodriguez	752-5981	NA	ASB 1003	
Jim Vanderveen	752-1834	NA	Bainer 2007	
Justin Wu	NA	NA	NA	
Krasen Kovachev	752-8488	NA	Bainer 2101	
Matthew Mark	NA	NA	NA	
Melany Miners	752-9499	NA	Bainer 2132A	
Tina Le	NA	NA	NA	

Additional Training:

Communications for Campus-Wide Emergencies

In the event of a major emergency, there are multiple ways to distribute life-saving and other important information. Familiarize the individuals in your department with these communication methods:

- **Sign up in advance to receive UC Davis WarnMe messages**
This emergency notification service provides students and employees with timely information and instructions during emergencies. UC Davis WarnMe can send alerts by e-mail, text, telephone and cell phone messaging. To deliver messages, WarnMe uses employees' work contact information from the university's online directory, students' e-mail addresses and personal contact information you voluntarily provide. Register and update your information at <http://warnme.ucdavis.edu>.
- **Check the University homepage www.ucdavis.edu**
UC Davis posts information about emergencies and other major news on its home page at www.ucdavis.edu. News can also be found at www.news.ucdavis.edu
- **Check official UC Davis social media channels**
UC Davis posts emergency information on its official social media channels. These channels include twitter, Facebook, Instagram and Snapchat. You can subscribe to updates from UC Davis by liking or following the channels. You can find all of the University's official social media channels at <https://www.ucdavis.edu/social-media>.
- **Call the Emergency Status Line (530) 752-4000**
The Emergency Status Line provides a brief recorded telephone message about the status of the Davis campus in an emergency. Messages will indicate the emergency's nature, and provide brief instructions. As more information becomes available, messages will point to additional information sources, such as the UC Davis home page.
- **Follow reports in the news media**
UC Davis works with the news media to share information about emergencies and provide direction to the university community. KFBK Radio in Sacramento (93.1 FM / 1530 AM) is the primary station for the federal Emergency Alert System for several area counties.

In a campus-wide emergency, the campus may communicate using one or all of the above methods of communication depending on the incident.

You will not be notified of every incident to which the UC Davis Police or Fire departments responds.

Additional Training:

Sheltering-in-Place

One of the instructions you may be given in an emergency is to shelter-in-place. Shelter-in-place is used mainly for hazardous materials incidents and sustained police action, or when it is more dangerous to venture outside than to remain indoors in your current location. This means you should remain indoors until authorities tell you it is safe or you are told to evacuate. The following are guidelines that should be shared with your department's employees.

General Guidelines on how to Shelter-in-Place

- Select a small, interior room, with no or few windows, ideally with a hard-wired telephone (cellular telephone equipment may be overwhelmed or damaged during an emergency).
- Close and lock all windows and exterior doors.
- Review your EAP, inspect your workplace emergency kits if you have them.
- Do not exit the building until instructed to do so by campus officials.
- Check for status updates using the resources detailed in the section, "Communications for Campus Wide Emergencies."

Specific for a Hazardous Material Incident

- Turn off all fans, heating and air conditioning systems.
- If possible, seal all cracks around the door and any vents into the room.
- If you are in your car, close windows and turn off vents and air conditioning.

In an incident requiring you to shelter-in-place, it may take several hours before it is safe to leave your building. It is important to have food and water in your office or work location to last a minimum of 24 hours, and preferably up to 72 hours. Having a workplace preparedness kit is easy to make and a good idea.

Additional Training:

Community Survival Strategies for an Active Shooter

The UC Davis Police Department hosts workshops for members of the campus community on strategies to increase the likelihood of surviving an active shooter incident. The workshop covers five steps for increasing your chances of surviving an active shooter incident and also provides demonstrations for attacking the attacker.

It is recommended departments allow two hours release time for employees. Community presentations are available on the Davis and Sacramento campuses throughout the year. To locate or schedule a workshop visit the [UC Davis Police Department](#) website.

In the training, *Community Survival Strategies for an Active Shooter* participants should be aware that the presentation deals with a very sensitive subject and uses actual audio tape from the 9-1-1 call at the Columbine shootings. Participants will also have the opportunity to see different types of firearms and should be prepared to hear what an actual gunshot sounds like.

Training Sign-in Sheet

****All Employees need to have documented training ****

Training Topic: Emergency Action & Evacuation Plan

Date: _____

Instructor/Trainer: _____

1. _____
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