Designing an earthquake prediction model using Python and artificial intelligence is a complex and challenging task that involves multiple steps. Here's a high-level overview of how you can approach this:

1. Data Collection:

- Gather earthquake data from reliable sources like USGS (United States Geological Survey) or other seismic monitoring agencies.

- Collect additional relevant data, such as geological information, fault line data, and historical seismic activity records.

2. Data Preprocessing:

- Clean and preprocess the collected data, handling missing values and outliers.

- Convert data into a suitable format for machine learning.

3. Feature Engineering:

- Extract meaningful features from the data that can be used to predict earthquakes. These could include seismic activity patterns, geological features, and historical earthquake records.

4. Selecting a Machine Learning Algorithm:

- Choose an appropriate machine learning algorithm for prediction. Time series forecasting techniques like LSTM (Long Short-Term Memory) or classical regression models like Random Forest can be used.

5. Model Training:

- Split the data into training and testing sets.

- Train your chosen machine learning model on the training data.

6. Model Evaluation:

- Evaluate the model's performance using appropriate metrics like Mean Absolute Error (MAE), Root Mean Squared Error (RMSE), or others.

- Fine-tune the model parameters to improve its accuracy.

7. Real-Time Data Integration:

- Set up a system to gather real-time seismic data, preprocess it, and feed it into your trained model for predictions.

8. Deployment:

- Develop an interface or API for users to access earthquake predictions.

- Deploy your model in a cloud environment or on a server for real-time predictions.

9. Continuous Monitoring and Maintenance:

- Regularly update your model with new data to ensure its accuracy.

- Monitor the model's performance and make necessary adjustments.

10. Communication and Alerts:

- Implement a notification system to alert relevant authorities and the public when significant earthquake predictions are made.

11. Ethical and Safety Considerations:

- Ensure responsible use of your model, taking into account the potential impact of false alarms or late warnings.

- Collaborate with experts in the field to validate predictions and avoid unnecessary panic.

12. Regulatory Compliance:

- Comply with any local, national, or international regulations and standards related to earthquake prediction and warning systems.

Remember that earthquake prediction is a complex and highly uncertain field, and accurate predictions are challenging. AI models can assist in this area, but they are not a silver bullet. Collaboration with experts and ongoing research are crucial to improving prediction accuracy.

This is a broad overview, and each step involves a lot of detailed work. It's essential to have a multidisciplinary team with expertise in machine learning, geophysics, and domain knowledge in earthquake prediction to undertake such a project.