0:13   Hello. Welcome to our course on budgeting and scheduling projects. Together, we are going to look how to identify the resource needs of your project. We're going to look at estimating approaches and taking those estimates and turning them into a budget, creating a realistic schedule, and making quality a part of your project. All important projects, so off we go.

0:35   When we discussed the work breakdown structure, or the WBS, we talking about decomposition. We talked about how it means to break the work down. We discussed how low should you go in terms of your breakdown. And we discussed the 880 rule, the distance between two status points, and when it makes sense to ignore those guidelines.

0:56   In order to understand your project resource needs, you are going to revisit your work breakdown structure. It is possible that you stopped at a level which was detailed enough to know that the work to complete the scope was included, but perhaps not detailed enough to assign the work.

1:12   Take another look at your work packages. Remember, a work packages is the lowest level of your WBS, no matter how low you went. If your work packages are low enough that you can now use them to determine what types of resources are needed, great. If not, now is the time to decompose them into activities.

1:32   By activity, I mean a piece of work that is assignable and can go into the schedule. Some people would use the word task.

1:41   Previously, we had been working with a sample project that involved redesigning the hiring processes used by our human resources department. Perhaps when we created this WBS, we left the deliverable of create process training at a very high level. Perhaps this was because we knew the training department would help break this down at a later time.

2:01   Well, now is that time, because Create Process Training is not enough detail to know what types of resources are needed. This might be a good time to point out that when I am using the term resources, I am thinking of people and more. Money, equipment, materials, facilities, these are all types of resources. To really create accurate plans and a solid schedule and budget, we need to develop an understanding of everything that is needed to complete the work. Consider the training for the new human resources hiring processes. Is this going to be online training or in person training? Or both? The resources required for each approach will vary. For online training, it's very likely that some information technology resources might be needed. For in-person training, this is less likely to be true.

2:51   Decomposing the create process training is going to help identify who and what is needed to really create the training.

3:00   Once you have completed your decomposition, you can look at each work package and determine who or what is needed to make that work a reality. Remember, this is not something you need to do by yourself. Enlist the help of your team and certainly those who have the expertise in each area.

3:19   In our example, we need representation from the training department and if it is online training, quite possibly representation from the information technology team.

3:29   With your activities fully broken down and your resources identified, you can create the Responsibility Assignment Matrix, or RAM. If this sounds familiar, it should. We discussed the RAM as a good tool to help your team avoid roll conflict and roll ambiguity. Perhaps you are wondering where the information comes from to create the RAM, well now you know. You can create your RAM after you have fully decomposed your work packages from your WBS and you have identified your resources. Then you take your information about the human resources you need and place it into your RAM.

4:06   The project management institute recommends using what they call the RACI approach, R A C I. This means that those who are assigned to a work package are either responsible, accountable, consulted, or informed.

4:21   Those who are responsible are the individuals who are completing the work.

4:26   The person who is accountable is the person who is ultimately answerable.

4:32   This may not be the most positive way to say it but this is a person who must answer if there is a problem. There should only be one resource accountable for each work package.

4:42   The consulted designation represents a resource or resources who will provide input, perhaps a subject matter expert.

4:50   Informed is for those who need to be kept up to date on the progress of the work package.

4:57   An accurate RAM is really helpful to the team. It really provides visibility into who is doing what. Now with research information in hand, we are ready to continue on to our discussion on estimating.