

Appendix 1. Tentative Course Outline

Current course is tentatively planned as follows: a 10-hour pre-online course, an 80-hour in-person course, and a 5-hour post-online course.

Course	Area	Hours
Pre-online	Course that maximizes the learning effectiveness of the in-person course	10
In-person	Immunology	3
	Vaccine Technology Platform	4
	Process development	5
	Technology Transfer	4
	Quality Management	6
	Technology Discovery	2
	Clinical Development	5
	Product Lifecycle	3
	Data Management	2
	Epidemiology	2
	Project Management	3
	Intellectual Property	2
	Pre-Clinical	4
	Vaccine Safety	2
	Regulatory Affairs	5
	Special Lecture	4
	Facility Management	2
	Quality Assay	4
	Course Orientation	2
	Mini Convention	4
Interactive Session	4	
Excursion	8	
Post-online	Course that maximizes the utilization of in-person learning outcomes	5
Total		95