

WBS 1.6 (Software): Schedule (Template)

1.6 Software

ID	Task-name	Duration ^{2,3}	Begin-Date	Predecessors	Resources ¹ %-Person/ FTE
1.6.1	Hit Reconstruction	30 months²	09/01/2011		300/2.0(0.8)
1.6.1.1	PIXEL Hit Reconstruction	30 months	09/01/2011		150/1.1(0.5)
1.6.1.1.1	Develop/Test	8(4) months ³	09/01/2011	1.6.7.1	100/0.8(0.4)
1.6.1.1.2	Evaluate/Tune	6(2) months	09/01/2011	1.6.7.1	50/0.3(0.1)
1.6.1.2	IST Hit Reconstruction	30 months	09/01/2011		50/0.3(0.1)
1.6.1.2.1	Develop/Test /Eval.	6(2) months	09/01/2012	1.6.7.2	50/0.3(0.1)
1.6.1.3	SSD Hit Reconstruction	30 months	09/01/2011		100/0.6(0.2)
1.6.1.3.1	Update/Test/Eval.	6(2) months	09/01/2012	1.6.7.3	50/0.3(0.1)
1.6.1.3.1	R&D/Eval.	6(2) months	09/01/2012	1.6.7.3	50/0.3(0.1)

¹ See detailed breakdown in Appendix

² Top level duration of a task refers to time span it is needed to be done

³ Sub-level duration refers to actual time needed to complete the task

ID	Task-name	Duration	Begin-Date	Predecessors	Resources %-Person/ FTE
1.6.2	Tracking	36 months	09/01/2011		300/3.0(1.0)
1.6.2.1	Update/Test/Evaluate	12(6) months	09/01/2011	1.6.8/1.6.7.1-3	200/2.0(0.5)
1.6.2.2	Alternative Track. Eval.	12(6) months	06/01/2011	1.6.8/1.6.7.1-3	100/1.0(0.5)
1.6.3	Event Vertex Reconstr.	36 months	09/01/2011		300/2.0(1.5)
1.6.3.1	Au-Au Event Reconstr.	12(6) months	06/01/2011	1.6.2.1/1.6.2.2	100/1.0(0.5)
1.6.3.2	p-p Event Reconstr.	6(6) months	06/01/2011	1.6.2.1/1.6.2.2	100/0.5(0.5)
1.6.3.3	R&D	6(6) months	03/01/2010	1.6.2.1/1.6.2.2	100/0.5(0.5)
1.6.4	Decay Vertex Reconstr.	36 months	09/01/2011		200/1.5(0.5)
1.6.4.1	Fitter Dev./Test/Eval.	18 months	03/01/2010	1.6.8/1.6.7.1-3	200/1.5(0.5)
1.6.5	Calibration/Alignment	36 months	09/01/2010		500/4.7(2.0)
1.6.5.1	SURVEY	15(7) months	09/01/2011		190/2.3(1.1)
1.6.5.1.1	PIXEL Survey	7(3) months	09/01/2011		190/1.1(0.5)
1.6.5.1.2	IST Survey	4(2) months	09/01/2011		190/0.6(0.3)
1.6.5.1.3	SSD Survey	4(2) months	09/01/2011		190/0.6(0.3)
1.6.5.2	GLOBAL Alignment	13(6) months	09/01/2011	1.6.2/1.6.3	100/1.3(0.6)
1.6.5.2.1	PIXEL Global Align.	7(4) months	09/01/2011		100/0.7(0.4)

ID	Task-name	Duration	Begin-Date	Predecessors	Resources %-Person/FTE
1.6.5.2.2	IST Global Align.	3(1) months	09/01/2011		100/ 0.3(0.1)
1.6.5.2.3	SSD Global Align.	3(1) months	09/01/2011		100/ 0.3(0.1)
1.6.5.3	SELF Alignment	9(4) months	09/01/2011	1.6.2.1/1.6.2.2	100/0.8(0.2)
1.6.5.3	Test/Verify	3(2) months	09/01/2011	1.6.2.1/1.6.2.2	100/0.3(0.1)
1.6.6	Database/HFT Geometry⁴	36 months	09/01/2010		300/1.1(0.4)
1.6.6.1	PIXEL Geometry	6(3) months	09/01/2011		100/ 0.3(0.1)
1.6.6.2	IST Geometry	6(3) months	09/01/2011		100/ 0.5(0.2)
1.6.6.3	SSD Geometry	3(2) months	09/01/2011		100/ 0.3(0.1)
1.6.7	Response Simulators⁵	36 months	09/01/2010		200/0.8(0.3)
1.6.7.2	IST Simulators	6(3) months	09/01/2011		100/ 0.5(0.2)
1.6.7.3	SSD Simulators	3(2) months	09/01/2011		100/ 0.3(0.1)
1.6.8	Embedding/Assoc.	36 months	09/01/2011	1.6.6/1.6.7	100/0.5(0.2)

⁴ The estimated effort doesn't include possible/major infrastructure changes.

⁵ The effort for PIXEL response simulator is included in the Hit Finder task. We did not account efforts for possible very-slow simulator development.

Resources

ID	Task-name	Institutions	Name	% of time (max)	Years
1.6.1.1	PIXEL Hit Reconstruction	LBNL, IPHC, Purdue	Postdoc-1 Student-1	40(60) 20(40)	3 3
1.6.1.2	IST Hit Reconstruction	MIT	Postdoc/Stud.	20(40)	2
1.6.1.3	SSD Hit Reconstruction	KSU, BNL	Postdoc/Stud.	20(30)	2
1.6.2.1	Tracking Update	BNL, KSU	Postdoc/Stud.	30(40)	3
1.6.2.2	Alternative Tracking	BNL, ??	Postdoc/Stud.	10(20)	2
1.6.3.1	Au-Au Vertex Reconstr.	BNL, KSU,??	Postdoc/Stud.	20(30)	3
1.6.3.2	p-p Vertex Reconstr.	BNL, ??	Postdoc/Stud.	10(20)	3
1.6.3.3	R&D	BNL, KSU, ??	Postdoc/Stud.	10(20)	3
1.6.4.1	Secondary Vertex Rec.	BNL, KSU, ??	Postdoc/Stud.	50(70)	3
1.6.5.1	SURVEY	LBNL, MIT, KSU, BNL	Postdoc+Stud.	2x30(40)	3
1.6.5.2	GLOBAL Alignment	LBNL, MIT, KSU, BNL	Postdoc+Stud.	2x20(30)	3

ID	Task-name	Institutions	Name	% of time (max)	Years
1.6.5.3	SELF Alignment	LBNL, MIT, Purdue, BNL	Postdoc/Stud.	50(60)	2
1.6.6	Database/HFT Geometry	LBNL, MIT, KSU, BNL	Postdoc/Stud.	2x50(70)	3
1.6.7.2	IST Simulators	MIT	Postdoc/Stud.	30(40)	3
1.6.7.3	SSD Simulators	LBNL, KSU, BNL	Postdoc/Stud.	20(30)	2
1.6.8	Embedding/Assoc.	???	Postdoc/Stud.	20(30)	3